

**Decolonization as Relocalization:
Conceptual and Strategic Frameworks of the *Parque de la Papa*, Qosqo**

by
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Bachelor of Arts - Trent University, 2007
Bachelor of Arts - Trent University, 2008

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Supervisory Committee

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Abstract

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The work at hand traces the trajectory of one particular iteration of decolonization praxis, from its origins in pre-colonial Andean thought through to the consciously traditional collective life being forged by six Quechua communities in Qosqo, Perú. It diverges from other investigations of Indigenous praxes by undertaking a purposefully non-comparative analysis of both the concepts and strategies employed, as well as of the consonances and tensions between the two. The case study detailed here offers a rebuttal to prior theories of an Indigenous political absence in the Peruvian highlands through offering evidence of a uniquely Andean place-based politics. It details efforts to revitalize and repatriate the cultural landscape of the Quechua *ayllu*, drawing on a variety of tactics to assert the primacy of the relationship between Andean Peoples and Andean lands. This is decolonization as relocalization, wherein the near-ubiquitous ‘local’ of non- and anti-state discourses is reconceptualised as ‘emplacement.’

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List of Acronyms

ANDES	<i>Asociación para la Naturaleza e Desarrollo Sostenible</i> (Association for Nature and Sustainable Development)
CAB	Constituent Assembly of Bolivia
CBD	<i>Convention on Biological Diversity</i>
CCA	community conserved area
CERD	United Nations Committee on the Elimination of Racial Discrimination
CGIAR	The Consultative Group on International Agricultural Research
CIMMYT	<i>Centro Internacional de Mejoramiento de Maíz y Trigo</i> (International Maize and Wheat Improvement Center)
CIP	<i>Centro Internacional de la Papa</i> (International Potato Centre)
COR	Congress of the Republic (of Perú)
ETC	Action Group on Erosion, Technology and Concentration
FAO	Food and Agriculture Organization of the United Nations
FPP	Forest Peoples Programme
GCDT	Global Crop Diversity Trust
GDP	gross domestic product
GMO	genetically modified organism
IACHR	Inter-American Commission on Human Rights
IIED	International Institute for Environment and Development
ILO	International Labour Organization
ILO-169	<i>International Labour Organization Convention concerning Indigenous and Tribal Peoples in Independent Countries</i>
IPS	Inter-Press Service
ISNAR	International Service for National Agricultural Research
IUCN	International Union for Conservation of Nature
IWGIA	International Work Group for Indigenous Affairs
masl	metres above sea level
OECD	Organisation for Economic Co-operation and Development
PdIP	<i>Parque de la Papa</i>
RAFI	Rural Advancement Foundation International
TK	traditional knowledge

TWNThird World Network
UN.....United Nations
UNCED.....United Nations Conference on Environment and Development
UNDP.....United Nations Development Programme
UNESCO.....United Nations Educational, Scientific and Cultural Organization
UNHRC.....United Nations Human Rights Council
UNU-IASUnited Nations University Institute of Advanced Studies
USDA.....United States Department of Agriculture
US-EPA.....United States Environmental Protection Agency
WHOWorld Health Organization
WIPOWorld Intellectual Property Organization
WPCWorld Parks Congress
WTOWorld Trade Organisation

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A Note on Runasimi

Runasimi – literally, ‘people’s tongue’ – is the language of the Quechua. The particular variant spoken in the Urubamba Valley and surrounding region is colloquially known as ‘Cusco Quechua,’ one of five *Runasimi* dialects found in Perú. Quite often terminology passes back and forth between Spanish and *Runasimi*, resulting in adapted or borrowed words and phrases; these are identified in Appendix A (‘Glossary of Foreign Language Words & Phrases’) by the notation ‘*Runasimi*/Spanish.’ Wherever possible I have avoided pluralizing words in *Runasimi* according to the Spanish (and English) convention of appending a singular term with an -s or -es, and instead either used the suffix *-kuna* (signifying a plurality of disparate elements constituting a larger whole) or used “the singular form with plural intent” to indicate ‘many’ (as is often the custom in speaking) (Froemming, 1999, p. 926). Hence, for example, *papa* (potato) appears throughout the text, rather than *papas*, even though the latter term is common in the literature on Andean agropastoralism. There are exceptions to this, of course, mainly in using proper names (for example, the economic collective known as *Papas Arariwas*, or ‘Guardians of the Native Potato’). The Quechua name for the provincial capital of Qosqo is used intentionally and politically.¹ Foreign language words and phrases appearing in-text are italicized unless they have become familiar inclusions in English-language materials and would not normally require translation (like llama or alpaca).

¹ Note that this is an officially recognized spelling according to *Municipal Resolution No. 078-A/MC-SG-90* (1988).

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For Michael, who makes everything possible;
and Waz, who woke me up.

Introduction

The work at hand traces the trajectory of one particular iteration of decolonization praxis, from its origins in pre-colonial Andean thought through to the consciously traditional collective life being forged by six Quechua communities in the Urubamba Valley of Qosqo, Perú. Because they are difficult to tease apart, and since they represent very different and ostensibly interdependent spheres of action, both the Quechua communities themselves and their Indigenous nongovernmental partner organization are profiled here. The communities are Sacaca, Chawaytire, Pampallacta, Paru Paru, Amaru, and Cuyo Grande, which in 2000 confederated as a single entity, the *Parque de la Papa*. The Indigenous NGO is the *Asociación para la Naturaleza y el Desarrollo Sostenible* (Association for Nature and Sustainable Development), or ANDES.

The field work undergirding this thesis began in early February 2011, though the research on Indigenous issues in Perú began many months earlier. Similarly, three months of service work in the *altiplano* were preceded by a month of virtual effort on behalf of ANDES, which gained the author a grounding in both the local efforts of the communities of the *Parque de la Papa* and the organizational character of their NGO partner. The expectations of these groups dictated the research question, while additionally guiding much of the methodology. ANDES wanted a record of the work they and the communities had undertaken to date, loosely organized under the rubrics of conservation, development, and Indigenous rights. The strategies assembled as part of that record were certainly interesting, and fittingly had already generated a great deal of interest, making a comprehensive accounting of the existing literature an early part of the task. Extensive reading revealed that the work here was being written about as a series of *ad-hoc* tactics, invariably reactive, and always associated with vague, fairly stereotypical notions of the familiar (i.e. universal) sacred.

As a result of these lacunae, the author became interested in generating not merely a record, but a genealogy of these strategies that included their practical and metaphysical parentage. The intention was to discover whether and how the people in these Quechua communities, working with this Quechua organization, were able to bring traditional perspectives forward and put them to work in the world as contemporary initiatives of

decolonization and resurgence. Any praxis – whether based on a codified theory or informally elaborated through action – has prescriptive, descriptive, interpretive, explanatory, and predictive tasks to perform, each of which possesses strong and culturally specific valuational dimensions. There was no way to fathom these dimensions without starting from, for lack of a better term, Quechua first principles. Examining strategies through laying out an underlying conceptual framework, rather than allowing them to exist merely as a scattered set of provisional schemes and free-floating principles, also offered several practical advantages. In terms of exposition: it provided a strong scaffold for the work. In terms of argumentation: it both clarified and supported analyses intended to (a) identify instances where professed intentions and concrete outcomes did not match up, and (b) differentiate between the outright abandonment of principles and cases in which external forces warped or stifled the expression of those principles (since both ‘failures’ will look the same in outcome, but will differ drastically in cause and intent).

That research task proceeded by two complementary research pathways: a thorough review of ANDES’ own material, both internal documents housed in its offices in Qosqo and articles published in scholarly and non-scholarly fora (online and in print); and data gleaned from informal discussions and participant-observation in the communities and with ANDES staff. This was undergirded by an extensive engagement with the literature on Andean Indigenous metaphysics, social and political thought, and meta- and applied ethics, which fuelled the construction of the conceptual framework; and a review of scholarly and journalistic work on the Peruvian context (social, political, and economic), which contributed to the background of the case study. Observations made in the subsequent analysis² arise from the author’s own interpretation of the relationship between the broader principles and goals laid out in the literature, to which ANDES and the communities of the *Parque de la Papa* appeal; and the observations gleaned and information relayed in person, in the field, about the selection, deployment, and fallout of tactics chosen in pursuit of those goals and in the name of those principles.

A background in philosophy inclines the author toward, whenever possible, definitions and explanations ‘in the positive.’ If one has never seen a chair, it helps

² That analysis follows, instead of being woven through, a detailed account of the conceptual and strategic framework – a structure that, like the selection of the research question and methodology, was dictated by the service-learning component of the project at hand.

matters little to find a definition running along the lines of, ‘not a table.’ ‘Kind of like a table’ is a similarly problematic description, though slightly more helpful. Comparative analyses can be a very useful starting point, and are often a necessary centre of origin for inquiry that travels from the familiar to the unfamiliar, but in addition to their inherent clumsiness, comparatives trap Indigenous thought and action in a space not of their own construction and in which they will not necessarily flourish. Instead of seeking to understand an Indigenous idea or practice on its own terms, to try to perceive what it is in itself, the prevalent academic method involves weighing it against the closest non-Indigenous comparative and finding it either exceeding or lacking some essential Good. Moreover, in many cases the need to differentiate readily blurs into the urge to rank, turning lateral analysing into horizontal ordering.

The project as a whole began with concern for whether and how a particular Indigenous philosophy gave rise to a specific decolonizing praxis, not which political theory best described the situation on the ground. Similarly evident is the desire to avoid applying external criteria and categories to the project at hand, imposing non-Andean measures of authenticity, legitimacy, and success – whether those measures are Indigenous or not. Instead, the work attempts to plot both the path and the destination using only Quechua coordinates – again, wherever possible. No doubt this strategy will show mixed success. The author is also aware of the internal inconsistency shown in declaring an intention to navigate using Quechua concepts and proceed to trot out the standard Western philosophical divisions of metaphysics. Rather than backpedalling explanations, *mea culpas* are probably in order, since frames inculcated in upbringing and imposed through training are impossible to completely shed – yet it is worth noting that an approach through familiar terminology need not lead to comparatives based on that vocabulary, and the author has consciously endeavoured to steer the work away from such engagements. A similar admission of weakness is called for in terms of the field work undertaken in the course of researching this thesis. It is exceedingly difficult to come to understand key aspects of any unfamiliar culture in just twelve weeks, and flatly impossible to come to grips with two (Quechua and Peruvian) in that same time, particularly when that journey requires the use of not one but two foreign tongues (Runasimi and Spanish). Since this is exactly what was attempted in Perú, in the course of

pursuing the topic at hand, it is important to admit to the author being doubly disadvantaged in seeking out and reporting findings – and almost certainly foolish for making the attempt.

This thesis is divided into three sections: background, case study, and analysis. It begins with a survey of the social, political, ecological, and cultural spaces occupied, navigated, and nurtured by Quechua in Perú, grounded in an extensive array of literature written on and from Andean Indigenous perspectives. This section outlines the environment – a terrain both physical and political, housing threats both natural and designed – in which the *Parque de la Papa* roots. The subsequent in-depth case study of the confederated communities, as supported and often guided by ANDES, is laid out as two complementary halves: a conceptual framework that seeks to understand the broad strokes of Quechua ontology, epistemology, and ethics; and a strategic framework that endeavours to explain how the *Parque de la Papa* and ANDES consciously carry this conceptual framework forward, turning concepts into tactics, processes, and systems. These practices are both proactive, nurturing the land and culture; and reactive, resisting the current and rejecting the prior reach of colonialism into the Andes. An analysis of the positive and negative lessons of the case at hand, in the context outlined, rounds out the body of the paper.

The case study detailed here offers a rebuttal to prior theories of an ‘Indigenous political absence’ in the Peruvian highlands, through offering evidence of a uniquely Andean place-based politics. It finds that – though not without cautionary lessons – ANDES and the communities of the *Parque de la Papa* do succeed in rooting contemporary strategies in traditional conceptual frameworks, drawing on a variety of tactics to assert the primacy of the relationship between *Runakuna* (Andean Peoples) and *tirakuna* (Andean lands). The conceptualizing, founding, and functioning of the *Parque* reflect a conscious attempt to revitalize and repatriate the cultural landscape of the Andean *ayllu*, the emblematic Quechua community that has been mischaracterized and marginalized for centuries. This is decolonization as relocalization, wherein the ‘local,’ ubiquitous in (and almost a mandatory element of) non- and anti-state discourses is reconceptualised as ‘emplacement.’

Situating People & Place At the Heart of 'The Four Quarters'

The Andes rise up suddenly along the entire length of the Peruvian seaboard, leaving a relatively narrow strip of arid coastline to the west and the expansive jungle of the Amazon basin to the east. These mountains constitute a vast glacial watershed that feeds not only the upland valleys, but also the tropical rainforest and coastal desert below (Nickel, 1982). The Central Andes are, in fact, the highest mountains in the tropics, their elevation increasing as one crosses Perú from north to south. The environment here shows sharp altitudinal and latitudinal shifts, corresponding with similarly abrupt changes in geologic composition, slope orientation, wind, and precipitation, which together give rise to no less than eight natural meta-regions (Pulgar Vidal, 1987, as cited in Nickel, 1982; Rivera, 1998). Because soils and climates appear in staggering variety within each of these regions, the ecology of the Andes is not only characterized by extreme density and diversity, it favours maintenance of that diversity by encouraging hybridization and mutation in native flora and fauna (Rivera, 1998). As a result, though it covers less than one percent of the Earth's surface, the tropical Andes cradles approximately one-sixth of the world's botanical life (including upwards of thirty thousand species of vascular plants) and eighty-four of the planet's hundred-plus identified ecosystems (ISNAR, 1987; Muller, 2006; Richter, Diertl, Emck, Peters, & Beck, 2009). This astonishing phytogenetic wealth makes Perú one of only ten countries the world over designated as 'megadiverse,' and as such a critical reserve of the Earth's domesticated and wild genetic diversity (Muller, 2006, 2009; Tobin & Taylor, 2009). This region is also the heart of the 2,000,000 square kilometre socio-political entity the Inka referred to as Tawantinsuyu, 'Land of the Four Quarters.'³ The western slope of the Andes, at about 4,000 metres above sea level (masl) and running in a strip 7,000 kilometres long, is today home to the Quechua and Aymara, peoples who were part of Tawantinsuyu and now find themselves

³ The four territories were, by name and location: Chinchasuyu to the northwest; Condesuyu to the southwest; Antisuyu to the northeast; and Collasuyu to the southeast (Argumedo & Pimbert, 2005).

contained within and scattered across the boundaries of Perú, Argentina, Ecuador, Chile, and Bolivia (Argumedo & Pimbert, 2005; Bolin, 1999).

In Perú, both the major Indigenous group and the eco-region of the *cordillera* lying between 2,300 and 3,500 masl are known as *quechua*.⁴ This particular zone houses some of the most varied and complex natural and built environments on Earth (Wilson, 1999). Rich biological diversity, it has been noted, often coincides with cultural diversity – indeed, the richness of certain landscapes cannot be explained through geophysical and climate mechanisms alone (see, for example, Mitchell, 2003; Rivera, 1998). Accordingly, Perú is not only one of the most biodiverse regions on Earth; it is additionally home to one of the largest Indigenous populations of any country. Though sources vary on the size of this demographic, both in terms of sheer numbers and percentage of the populace, the sixty-plus distinct Indigenous groups here certainly count somewhere near nine million members and make up approximately forty percent of the national population, constituting a clear majority in certain areas (particularly the central and southern highlands) (Argumedo & Pimbert, 2005; Gonzales, Machaca, Chambi, & Gomel, 2010; Muller, 2006).

Over eighty percent of the country's six thousand Indigenous communities are located in the Andes, where Quechua and Aymara villages are disproportionately represented in statistics on poverty and extreme poverty⁵ (Argumedo, 2008; Argumedo & Pimbert, 2005; J. Escobar & Ponce, 2007; Figueroa & Barrón, 2005; Muller, 2006). A persistent urban bias sees major centres privileged in multiple public service areas, particularly medical care, education, transportation, potable water, and plumbing and

⁴ As is often the case in Indigenous societies, the name applied by the colonizer is not the same as that used by the people themselves. In this instance, although the name *Quechua* has been adopted and is today used to self-identify both internally and externally, the Peoples' original self-referent was *Runakuna* (literally, 'the people'). The Runasimi word *quechua* actually means 'temperate land.'

⁵ Argumedo and Pimbert (2005) report that 19% of poor Andean Peruvians are Indigenous; of those classified as 'extremely poor,' more than 75% are Indigenous; over 90% of Quechua are counted among the 'extremely poor.' Escobar and Ponce (2007) cite somewhat different figures, with almost 80% of rural Quechua living in poverty and 55% in extreme poverty. The World Bank and INEI (Perú's national statistics and technology bureau) classify 'extreme poverty' as including all individuals whose monthly expenditures total no more than S/.121.2 (approximately US \$1 per day). Note also that the rate of poverty in rural areas is double that in Lima (IWGIA, 2011d).

waste disposal,⁶ so that health outcomes are emphatically skewed against rural areas, and therefore against the Indigenous *ayllu* (communities) that make up the rural majority (Argumedo & Pimbert, 2005; Figueroa & Barrón, 2005; Mendoza, 1998). In its last report on Perú, the United Nations Committee on the Elimination of Racial Discrimination (CERD) (1999) noted an almost twenty-year discrepancy between the life expectancies of Indigenous and non-Indigenous persons – outcomes that certainly count among what Rex calls, “the structural consequences of historic wrongs” (1995, p. 252). Tellingly, the five highland *departamentos* (provinces)⁷ in which Perú’s six million Quechua and Aymara persons predominate are colloquially referred to as the *mancha india* (literally, ‘Indian stain’) (Freeland, 1996; ILO, 2011; IWGIA, 2011b, 2011c; Van Cott, 2005). These same *departamentos* are the nexus of biological and cultural diversity in the Peruvian Andes, wherein Quechua and Aymara *chakra Runa* (farmers) continue their ancestral subsistence agro-pastoralism, agro-forestry, and coincident nurturance of the land.

Indigenous Lands, Indigenous Foods

More than half of today’s principal food plants (one hundred and eighty individual varieties) were originally bred by Andean Indigenous agriculturalists (Argumedo & Pimbert, 2006; von Hagen, 1957). Those crops, brought back to Europe by Spanish mercenaries, soldiers, and missionaries, changed the course of human history – the Inkan *papa* (potato) in particular, which within twenty-five years of being displaced from its origins was feeding the nascent European proletariat, literally fuelling the Industrial Revolution (Dowie, 2008). Substantial evidence locates the birthplace of South American agriculture in the *altiplano* (highland) region of what is now Perú (Mann, 2005). This area shares status as a centre of world origin of agriculture (dating back to 10,000-12,000 BCE) with only seven other regions: Papua New Guinea, Mexico, the Middle East, the Sahel, parts of China, and southern India (ISNAR, 1987; Muller,

⁶ In the Qosqo *departamento*, for example, 20% of people have only a primary education and 40% are illiterate, while only a third of households have access to safe water, almost three-quarters lack basic sanitation, and less than 1% have motorized transportation (Argumedo & Pimbert, 2005).

⁷ Specifically: Ayacucho, Apurímac, Qosqo, Huancavelica, and Puno.

2009). Unlike those other centres of origin, though, in the Andes one does not find vast swaths of fertile, temperate, easily (even incidentally) irrigated plains. Instead, one finds a complex equatorial ecological mosaic, in which an unending sequence of steep, rocky slopes give rise to astonishing variation in growing conditions. High-altitude desert exists virtually side-by-side with marshland and forest; and within a relatively short vertical span a climber can move from penetrating cold to sweltering heat, continuous shade to brilliant sun, from bare rock to sand, to thick soil anchoring lush vegetation.



The Inka 'plant laboratory' at Moray, Qosqo province; each step of each quarter of the circle represents a microclimate

The Quechua historically cultivated *chakra* (agricultural fields) extending across more than 1,000 vertical metres of this varied terrain, moving higher or lower seasonally and with swings in the weather (Dillehay, Bonavia, & Kaulicke, 2004; Wilson, 1999). Their particular form of agriculture, perfectly adapted to the Andes, involved what

Weismantel (2006) calls ‘verticality’ (or vertically diversified farming), the practice of managing the challenges of mountain agriculture by purposefully planting at a variety of elevations, conceptualizing these disparate zones as part of a larger, integrated whole. Murra (2002) famously referred to the upward-scattered, non-contiguous Andean *chakra* as ‘vertical archipelagos;’ Pizarro’s secretary called them *escalones de piedras*, when in the 16th century he described them blanketing every mountain (Sancho, 1917). At that time, Tawantinsuyu’s *chakra* housed approximately as many crop species as all of Europe and Asia – nearly seventy – and the food system as a whole could support some fifteen million persons (NRC, 1989; Rivera, 1998; Wilson, 1999). Spanish chroniclers reported that Inka storehouses held seven years’ worth of food, expertly preserved, providing a bulwark against natural disasters and productivity ebbs (NRC, 1989). This wealth of sustenance was grown by individual farming communities, who – without iron, money, the wheel, or draught animals⁸ – established millions of irrigated, fertile *andenes* (terraces) over thousands of vertical and millions of horizontal metres (NRC, 1989; von Hagen, 1957). The hardy staples that populated these storehouses included many of today’s common highland crops: *sara* (maize), *kiwicha* (a grain), *kinwa* (a pseudograin⁹), *tarwi* (a legume), *oca* (a tuber), and *papa* (the Andean potato) of countless disparate colours, nutritional values, shapes, flavours, and sizes, that had been grown in local *ayllu*, eaten throughout the empire, and honoured in ceremony for thousands of years. The native *chakra* of these food crops were colonized by European crops just as aggressively as the rest of the Andean landscape was colonized by European bodies; Indigenous farmers were commanded to cultivate the wheat, barley, carrots, and broad beans that better suited the palates of the Spanish settlers (NRC, 1989). Along with alien flora and fauna, Quechua farmers were compelled to take up colonial farming techniques suited to an altogether different growing environment and economic order, in order to feed the burgeoning neo-European population. For the communities of the *altiplano*, this task was ecologically, economically, and culturally pernicious. Trigo (2010) asserts that, from this

⁸ Livestock here were then, and are still primarily, camelids – animals that do not readily ‘take to’ the plough (Guillet et al., 1983).

⁹ *Kinwa*, which is treated as a grain in the local cuisine, is actually a chenopod, a vegetable related to spinach and beets. The grain-like material that is gathered, cooked, and eaten is actually the seed of the plant (Kerssen, 2010).

point forward, “Andeans began to measure our success by an ‘index of modernity’ which meant nothing other than how close our systems were to those of Europe” (as cited in Gonzales, et al., 2010, p. 163).



Inkan andenes adjacent to the Parque de la Papa, Qosqo province

A colonial hierarchy of food persists in the Andes, where today urban restaurants often serve rice or standard white potatoes, considered more European and therefore cosmopolitan starches, over the ‘peasant’ varieties of *papa* and native *kinwa* (ironically, a food crop described as having “international celebrity status” outside of Perú) (Kerssen, 2010). Native grains and tubers are now largely found in smallholder plots on marginal land and are, in a perverse symmetry, principally eaten by marginalized people (NRC, 1989; Wilson, 1999). In some areas of the *altiplano*, over ninety percent of the food on the dinner table is derived from local domesticated and wild plants (Gade, 1975).¹⁰ Cultivated native plant species in Perú number between 130 and 220, depending on the source, while almost half of these are Andean (Brack, 1999; Muller, 2006; Ruiz, Lapeña, & Clark, 2004). In addition to staple starches, such crops include fruits, medicines, spices and aromatics, and botanical sources of dry fuel and oil (Muller, 2006). When

¹⁰ The remainder is contributed by Andean livestock (Gade, 1975).

wild foods are added (including those that outsiders would identify as ‘weeds,’ a concept that does not exist in Andean agriculture), the tally of cultivated species passes 1,000 (Rivera, 1998). Medicinal plants, used by the Quechua to treat everything from the common cold to cancer, number approximately 4,000 (Hammond, Fernández, Villegas, & Vaisberg, 1998; Ruiz, et al., 2004). This diversity manifests not only in the number of species, but in the number of varieties within each species – the number of *sara* strains grown in Perú, for example, equals the number grown in all other countries in the world combined (Rivera, 1998).

Even in this hub of agro-biodiversity, however, the number of traditional varieties under cultivation has been steadily decreasing, to the point that some have all but disappeared from Andean *chakra* (Farmers' Rights, 2006/2007). The major cause has been rapidly accelerating weather-related disruptions, which are particularly brutal in this, the world's third most climate change-affected country (KOHA, 2011).¹¹ The Peruvian Andes contains almost three-quarters of all tropical glaciers. A third of that ice mass has been lost in the past fifty years, some glaciers vanishing altogether, taking their vital contribution to drinking water, irrigation, and power generation with them (Bury, French, McKenzie, & Mark, 2008; Fraser, 2009; Kerssen, 2010; Vuille et al., 2008). This ebbing water source is drastically affecting tuber cultivation, which has additionally had to shift hundreds of vertical feet to compensate for rising temperatures (Murphy & Townsend, 2010; Silberner, 2008; Uenuma, 2009). Upward movement is a sharply limited coping strategy, though, since one cannot ascend very far in the *altiplano* before hitting a summit, a mining concession, or bare rock. Add to this the fact that even when cooler temperatures can be found at higher altitudes, climate change has made the dry months are drier and wet months wetter, creating ideal conditions for fungi, bacteria, nematodes, and viruses; while the winters that used to kill plant-devouring insects are now too mild to halt their spread (Kerssen, 2010; Reid & Swiderska, 2008; Rivera, 1998). Alpine plants are generally highly intolerant of temperature shifts, but *papa*, because it is grown from clonal stock instead of seed, is also unusually susceptible to the more than three hundred different infections and infestations that target tubers (GRAIN, 2000).

¹¹ According to the UK's Tyndall Centre on Climate Change, Honduras and Bangladesh are the countries hardest hit by climate change-related disasters and hardships (KOHA, 2011).

Other agroecological threats, scaling up with the weather swings, include frosts, a severely shortened growing season (reduced from six to four months, with proportionately reduced yields), altered photoperiods, and disrupted soil quality (Goland, 1993; Kerksen, 2010; Murphy & Townsend, 2010; Reid & Swiderska, 2008). The old signs that have always rooted weather forecasting are, as a result, becoming less and less reliable. Since agriculture is a science based on predictability, this loss is a major blow to farmers. Unanticipated rain washes seed out of the soil at one end of the agricultural cycle, drowns seedlings in the middle of it, and rots grains and tubers at the other end. Unanticipated drought retards plant maturation and wilts crops, and is especially dangerous during flowering or fruiting periods.¹² Unanticipated frost kills plants where they root. In the Andes' agrocentric Indigenous communities, the contraction in agrobiodiversity entailed in climate change translates directly into increased vulnerability, decreased nutritional status, and greatly impaired functioning of the traditional Andean networks for exchanging seed, knowledge, and aid (Argumedo, 2008). Yet the profound economic, physical, and social fallout of natural and transboundary threats to biodiversity are more than matched, in both scope and pace, by domestic political threats to people and culture.

Colonial & Neocolonial Perú

Not even thirty years elapsed between Inkan contact with the forces of Francisco Pizarro González and the arrival, in Lima, of the first Spanish Viceroy. As in North America, the first attack on Indigenous communities was pathogenic, cutting a swath through 90% of the *Runakuna* years before invaders were physically seen (IWGIA, 2011e; Means, 1920). Camelids and wild animal populations were also devastated by these viral and bacterial outriders of the Spanish Crown (Fernandez, 1998b). When the *conquistadores* subsequently gained a foothold in a significantly depopulated land, colonialism unfolded not only as resource-seeking but also settlement-deploying, with the

¹² Further, a drier dry season leads to increased rates of erosion, desertification, and wildfires, and a wetter wet season brings flooding, avalanches, and landslides (Fraser, 2009; Kerksen, 2010; Murphy & Townsend, 2010).

aim being not the extraction of surplus by Spain *per se*, but instead the complete transformation of Indigenous Peoples' societies, territories, and economies (Spalding, 1973). Massive resettlement concentrated previously dispersed Indigenous communities into formations easier to oversee, control, and put to 'productive labour' (Gade, 1975). Perú is, in fact, the land where Bartolome de las Casas observed that the native population had been essentially enslaved¹³ (Means, 1920). Many Inka elites were complicit in their own peoples' subjugation – some shifting allegiance within twenty years of conquest – and engaged in handing over both labour and goods as the only officially recognized arbiters of exchange between the Spanish and Indigenous populations (Spalding, 1973). The rapid political, economic, and spatial recreation of Tawantinsuyu resulted in the *sierra* (mountains) receding from prominence in favour of the *costa* (coast), with the *selva* (rainforest) all but discounted. Lima, the heart of the Viceroyship, supplanted the pre-Columbian capital of Qosqo, and eventually became the seat of power of an independent Perú. The three natural, original regions (*costa*, *selva*, and *sierra*) became less of a coherent whole than they had been under the Inka, and are today still only “notionally integrated” (Freeland, 1996, p. 169). Language, music, ceremony, dance, dress, food, and other cultural and social expressions have always reflected the tripartite geographical partitioning of the country, but under Spanish, then Peruvian control the former rapport and balance between the three regions was lost (Gelles, 2003). Today there exists a hierarchy of biases that root in the country's geographical contours, wherein the coast is seen as superior to the inland regions; the city is thought preferable to the countryside (and Lima itself superior to any other city); the industrial-mercantile to the agricultural; the cosmopolitan or hybrid to the traditional – with Indigenous groups thus exhibiting coordinating, multiple, and overlapping inferiorities. Throughout Perú the rural realm in general is associated with 'Indianness,' construed pejoratively in terms of both class and race (Mendoza, 1998).

¹³ Eight million died in the mines alone, where the mortality rate was 80% in the first year of 'service,' a fate to which Indigenous adults and children were delivered through a form of conscription (Moses, 1914, as cited in Means, 1920).

'Incas Sí, Indios No'

In the course of building a national discourse, the Spanish Settlers would modify their own cultural loyalties to found a new identity (the 'native' Peruvian) while manipulating and imposing a variety of other ethnic and class designations – including *indio*, *mestizo*, and *campesino*¹⁴ – on the land's original inhabitants (Devine, 1999). At the other end of this dismantling of the contemporary category of 'Indigenous' can be found a concerted effort to appropriate the historical one. Since at least the late 1600s there has been a widespread attempt, even among the highest tiers of the aristocracy and in the ranks of the most obviously non-Indigenous, to secure political or artistic/intellectual legitimacy by claiming descent through Tawantinsuyu (Mannheim, 1984), an activity Greene characterizes as “[p]aying rhetorical homage to Perú’s Incaic roots” (2005, p. 35). Said’s (1978/1995) Orientalism here becomes Andeanism, an appeal to what Starn (1991) has referred to as ‘isomorphic tradition’ – distant, exotic, and timeless. At the same time, these ideologues, *indigenista* intellectuals,¹⁵ and nation-builders have shown no desire to affiliate themselves with the existing, ‘provincial’ Quechua and Aymara communities (IWGIA, 2011a; Mendoza, 1998). The internal inconsistency inherent in professing Inkan heritage while actively oppressing the Inkas’ descendants (and retaining privileges reserved for their colonizers) is downplayed, so that the desire to both claim and disavow Indigenous identity produces a curious ambivalence about ‘Indianness’ in Perú. The attempt to resolve this contradiction has resulted in a bifurcation of historical and contemporary Indigeneity, and the simultaneous lauding of the former and denigration of the latter – a position that Méndez famously referred to as *'Incas sí, indios, no'* (1995).

Received opinion up through at least the 1960s openly orbited the “racial degeneracy, moral depravity, intellectual inferiority, and utter degradation of the Indian” (Weismantel, 2006, p. 87). Privileged belief still holds that the Indigenous Peoples are “obstacles to modernity and elements of an age that refuses to pass,” (García & Lucero,

¹⁴ *Indio* is the pejorative term for ‘Indian,’ *mestizo* refers to individuals who have both an Indigenous and non-Indigenous heritage (the term used by Quechua is *misti*), and *campesino* is used to describe a rural farmer.

¹⁵ An ‘indigenista’ is defined as a student, supporter, or promoter of Indigenous cultures or causes

2008, p. 255) and conversely, that members of the Western, Spanish-speaking national minority are “the key to Perú’s future” (Gelles, 2003, p. 250). During his second term in office (2006-2011), President Alan García described Indigenous communal land management, and particularly the practice of granting usufruct to ‘less productive’ farmers, as a “historical mistake” (as quoted in Espinoza, 2009). Peruvian writer Mario Vargas Llosa, one of Latin America’s foremost novelists and essayists (and a Nobel laureate as well), has described Indigenous people in his homeland as “traditional, archaic, secret, and frequently in conflict with official law” (1983, p. 23), as well as naming Indigenous movements “threats to democracy in Latin America” (as quoted in Albro, 2005, p. 8). As a presidential candidate, he went so far as to declare that “[m]odernization is possible only with the *sacrifice* of Indigenous cultures” (1990, p. 51, emphasis added). Escobar sees in these kinds of pronouncements more than simple racism: “it reflects ontological intolerance; it is a war against non-modern ways of being, against people who, nevertheless, also practice modern ways” (2008, p. 36). The Quechua have thus been caught between the reified past, ideologically useful to Peruvians anxious to identify with an ancient morality or nobility, and the denigrated present, politically useful to demagogues eager to paint them as barriers to the success of Perú.

Indigenous individuals in rural and urban areas have most often dealt with this racism strategically rather than politically. In the cities in particular, and especially in navigating market relationships, it has been seen as advantageous to speak Castellano fluently or even exclusively, and to disguise visual markers of culture (for example, by abandoning traditional dress) (Paredes, 2008; Van Cott, 2005). Despite the fact that commenting on the ‘Indianness’ of an individual’s features is a common, and considered a particularly offensive insult, phenotype has, for centuries, been decreasingly associated with racial categorization (Ardito, 1997; IWGIA, 2011a; Mendoza, 1998). Further, throughout Latin America there has been a “prevalent, underlying intellectual belief in the ephemeral properties and superficiality of ‘Indianness’ as a cultural marker” (Devine, 1999, p. 64). The political ambition has thus been the eventual disappearance of the Quechua by intermarriage and resulting physical, cultural, and social hybridization (assimilation by incorporation, or erosion of Indigeneity from within); rather than through

bodily marginalization and destruction (assimilation by exclusion, or erosion of Indigeneity from without). Where Indigenous nations were kept apart in North American jurisdictions, positioned as external to the state from the moment of contact, they were purposefully drawn *in* in Perú, a country where relations were never treaty-mediated or framed as international in character. Accordingly, limitations on the Peruvian franchise had a European, rather than a North American flavour; for example, reserving voting for the literate¹⁶ or landed instead of explicitly delineating the ‘privilege’ by race (Ardito, 1997). Indigenous social and geographical mobility was not only possible here, it was encouraged – provided Indigeneity itself was left behind – and momentum added to the process through the aforementioned denigration of contemporary Native identity.



Popular TV character La Paisana Jacinta, a toothless, slothful, unkempt Quechua woman prone to public urination and brawling, portrayed by comedian Jorge Benavides (photo credit: Todo Arequipa, 2009)

Conversely, extensive and regionally unprecedented *mestizaje* (miscegenation) has failed to mitigate against the idea that cultural and racial characteristics naturally order people into valid hierarchies (Ardito, 1997; de Trazegnies Granda, 1987; IWGIA, 2011a; Mendoza, 1998; Paredes, 2008). Today, despite as much as half of the nation

¹⁶ It was not until 1990 that literacy-based voting restrictions were lifted (Argumedo & Pimbert, 2005).

having Indigenous heritage, there is little practical recognition of Peruvian society as heterogeneous (Ardito, 1997; Greene, 2005), and for the state, racism is “a characteristic [...] inscribed in its mandate to improve conditions of life and choosing superior ways over inferior ones” (de la Cadena, 2008a, p. 341). The 2006 election of congresswomen Maria Sumire and Hilaria Supa, both Quechua, was heralded as a sign of significant ground gained – yet the women’s demands to speak Quechua in session and to wear traditional dress were most charitably painted, by both their peers in Parliament and the national media, as “colourful irrelevance” (Paredes, 2008, p. 3). Many Peruvians still look at the rise of Evo Morales, an Aymara, as a warning of what ‘misfortune’ may yet befall their own country (García & Lucero, 2008; LiP, 2006; Tobin & Taylor, 2009). Party politics, even today, remains Lima-centric, a professional pursuit of privileged whites and *mistis* (Paredes, 2008). It is not for nothing, then, that Perú, “in terms of the ‘differential incorporation’ of its [Indigenous] majority,” has been compared to apartheid-era South Africa (Gelles, 2003, p. 248).

Politicking & Policymaking

From the days of the Republic to the turn of the millennium Perú experienced profound, protracted political instability. The country had on the order of 120 heads of state in those 180 years (1821-2001) – an average of eighteen months per political term – while less than half of sitting governments could be described as democratic (Figueroa & Barrón, 2005; IWGIA, 2011e). Civilian, authoritarian, and military rulers have succeeded one other in rapid and often arbitrary succession; Kruijt, in fact, characterizes military control of the Peruvian executive as “an intermittent custom” (1996, p. 242). The effect of these sharp, sudden shifts manifests today as a political culture marred by gross and blatant self-interest, with a correspondingly instrumental view of people and relationships. Both the left and right are strongly classist; democratic institutions are weak, lacking effective checks and balances and suffering from persistent authoritarianism; and populism and patronage are widely embraced (Dean, 2002b; Eyben, 2005; Yrigoyen Fajardo, 2002). The ultimate legacy of political inconstancy and

opportunism has been a lack of perceived legitimacy and moral grounding of government among the Peruvian population in general, and within Indigenous groups in particular.



Front page of a national paper, ridiculing Hilaria Supa's Spanish-language grammar (photo credit: Sharp, 2009)

Taking an even longer view, the International Work Group for Indigenous Affairs describes the Peruvian state as “hindered by its colonial legacy as former seat of the Viceroyship, the effects of which are still felt to this day” (IWGIA, 2011c). Arguably the administrative legacy of Spain persists in the idealism, paternalism, formalism, and legalism¹⁷ of Perú's political culture (Karst & Rosenn, 1975). Elites from right across the political spectrum overlook or deny claims made on the basis of cultural difference, and seldom hesitate to speak for Indigenous and *campesino* communities (Starn, 1991; Van Cott, 2005). As de la Cadena notes, in Perú “[t]he moderns (or educated) *do* politics and *make* policies to improve the life of populations, and particularly that of the non-moderns (or uneducated)” (2008a, p. 341). The paradigmatic example of this is the fact that Perú's

¹⁷ ‘Legalism’ refers to the country having an unusually high volume and wide breadth of laws on record.

Comisión de la Verdad y Reconciliación (Truth and Reconciliation Commission), an entity constituted in 2000 to address state- and guerrilla-inflicted harms visited overwhelmingly upon Indigenous Peoples,¹⁸ included not a single self-identified Indigenous Commissioner (de la Cadena, 2008a; García & Lucero, 2008).

Perú, nevertheless, has recently positioned itself on the world stage as a progressive political entity. It was a leader during negotiation of the UN Declaration on the Rights of Indigenous Peoples (UNDRIP), additionally voting in favour of adoption; was one of the first countries to ratify both the International Labour Organization's *Indigenous and Tribal Peoples Convention* (ILO-169) and the *Convention on Biological Diversity* (CBD); openly supports the United Nations' Agenda 21;¹⁹ had biotechnology legislation on record even before signing the Cartagena Protocol on Biosafety;²⁰ and currently hosts an office set up to implement the United Nations Educational, Scientific and Cultural Organization's *Convention for the Safeguarding of the Intangible Cultural Heritage* (Agurto, 2010; CERD, 1999; IWGIA, 2011d; Muller, 2009; Tobin & Taylor, 2009; UN-HRC, 2008). Despite these ostensibly forward-thinking activities at the inter- and supra-national levels, the country has made little actual progress on *de facto* collective rights or on effectively protecting recognized biocultural diversity (Agurto, 2010; Argumedo & Pimbert, 2006). Overall, the trend in community self-governance, Indigenous rights, and environmental policy in Perú has been ambiguity, lack of enforcement, and repeated downward revision since the drafting of a range of comparatively progressive legislation around the turn of the millennium (Agurto, 2009; IWGIA, 2011a). This supports the aforementioned assertion of the IWGIA, that Perú suffers from an excess of historical continuity, since the contemporary rhetoric of Indigenous rights extends the habit of the Viceroyship to pass, and then fail to enforce,

¹⁸ Almost eighty percent of the 70,000 people killed during the 15-year-long war between *Sendero Luminoso* / *Movimiento Revolucionario Tupac Amaru* and government forces were Indigenous, most of them Quechua-speaking. (CVR, 2003; Figueroa & Barrón, 2005; ILO, 2011; Paredes, 2008; UN-HRC, 2008).

¹⁹ Agenda 21, adopted at the United Nations Conference on Environment and Development (1992), includes a chapter on the role of Indigenous communities in environmental protection (CERD, 1999).

²⁰ *Law No. 27104 (Law for the Prevention of Risks Derived from the Use of Biotechnology)* was issued in May of 1999; *Supreme Decree No. 108-2002-PCM (Regulation on the Law for the Prevention of Risks Derived from the Use of Biotechnology)* was issued just over three years later, in October of 2002.

laws protecting the Indigenous Peoples from exploitation at the hands of *conquistadores*, *gamonales* (land barons), and *hacenderos* (plantation owners).

The state did not even formally recognize the existence of Indigenous communities until the 1920 Constitution – a document drafted a full century after Independence. The 1933 Constitution reiterated this recognition and declared an intention to protect Indigenous communities and their lands. In 1979, a new Constitution explicitly extended communal and territorial rights to Amazonian groups, while establishing that Indigenous lands could neither be sold nor transferred to third parties (Figueroa & Barrón, 2005; Muller, 2006). The current Constitution, drafted in 1993, advances recognition and *de jure* rights even further. The multiethnic/multicultural nature of the country is tacitly acknowledged via declarations that all persons are entitled to their ethnic/cultural identity (Article 2), while Indigenous languages stand as official in regions where they predominate (Article 48). Article 89 of the current Constitution establishes that,

[t]he rural and native communities have legal existence and are artificial persons. They are autonomous in their organization, community work, and usage and free disposal of their lands, as well as in the economic and administrative aspects within the framework as provided by law. The ownership of their lands is imprescriptible, except in the case of abandonment described in the preceding article. The State respects the cultural identity of the rural and native communities. (CoR, 1993/2006, p. 26)

Limited only by international human rights norms, Indigenous and *campesino* community authorities gain jurisdictional powers – an apparent acknowledgement of the validity of customary law – through Article 149. Overall, equality before the law, including the right to speak in one’s natal language before any authority, is recognized and protected (CoR, 1993/2006). Aside from their inclusion in the Constitution, rural communities are defined in *Law No. 25656 (1987’s General Law on Rural Communities)* as “public-interest organizations, with legal corporate status, comprising families who live in and control certain territories, linked by ancestral, social, economic and cultural connections, expressed in communal ownership of land, communal work, mutual assistance, democratic governance and development of multi-sectoral activities, geared

toward members' self-realization and the country's progress." (Guevara-Gil, 2006, p. 136). *Law No. 27811* (2002's *Traditional Knowledge Law*) qualifies that community control, investing power in 'representative organizations.'

The 'Constant Deception'

These *de jure* advancements, however, have failed to yield significant *de facto* results – in fact, in some key aspects the current Constitution represents a step backward. The 1993 version shifts the relationship between Indigenous groups and the Peruvian state from an already problematic 'protection' of communal rights to a market-economy-driven 'recognition' of individual rights. As a result, the land held as inalienable in the 1979 Constitution became market-incorporable after 1993, and accessible by third parties even if not sold or transferred. Under Article 88, uncultivated lands may now "pass into the control of the State for adjudication by sale" through being deemed 'abandoned' – a significant problem for Indigenous cultures whose traditional agricultural practices include field rotation and long fallow periods. Six years after the Constitution became law, CERD expressed 'official concern' about these particular regressions (1999, p. 3), while the Inter-American Commission on Human Rights (IACHR) determined that "the legal framework does not offer the native communities effective security and legal stability over their lands" (2000, p. c19). Most of the pluralist principles the existing Constitution articulates never found traction, particularly those relevant to Indigenous communities, thanks to weak implementation measures (Argumedo & Pimbert, 2005; Figueroa & Barrón, 2005; Yrigoyen Fajardo, 2002). Moreover, IWGIA describes the 1993 Peruvian Constitution as "one of the most reluctant [...] on the continent (among those with indigenous populations) in terms of recognising [Indigenous] rights," an "overtly colonial" document that "values 'different cultural and linguistic expressions' only in sections which promote overall integration" (2011a).

Individual pieces of legislation show this same patterning. In terms of the 'representative organizations' empowered by *Law No. 27811*, which exact organizations, identified according to what criteria of legitimacy, is not specified. The government has additionally endeavoured to muddy the waters by creating its own 'official' Indigenous

organizations that displace and divide those created by Indigenous Peoples themselves, and which truncate the ability of Indigenous communities to self-govern under either a traditional or a Westernized system (Swiderska et al., 2006). Indigenous forms of political expression have consistently failed to earn either official or practical recognition despite their rise in neighbouring plurinational countries (IWGIA, 2011c). Advocacy for change in these areas is not without risk, either, since the Peruvian state recently took measures to criminalize social justice activism. Massacres of Indigenous protesters have occurred as recently as 2009,²¹ while 2007's *Legislative Decree No. 982* had already amended the Criminal Code to declare police or military personnel who wound or kill in the line of duty neither criminally liable nor eligible for punishment (Agurto, 2009, 2010). This history of prevarication, opportunism, and 'ontological intolerance' – which have taken shape as a series of policies ranging from neglect to discrimination to annihilation – has led Andean Indigenous Peoples to define their relationship with the Peruvian state as:

a permanent *engaño*, a constant deception. This is not a circumstantial question of unfulfilled promises by bad authorities. Rather, *engaño* structures Indigenous communities' hyperreal relationship [...] with a state formation ontologically incapable of considering indigeneity a condition for interlocution. *Engaño*, a widespread relationship between the Peruvian state and indigenous citizens, is thus not easy to correct. Inclusion can only be offered in terms of the modern contract, which does not tolerate most indigenous ways of being, let alone their political manifestations, and can only suppress them using labels such as ignorance [or] folklore. (de la Cadena, 2008a, p. 342)

'A Country without Indigenous People:' The Enigma of Absence

Despite the fact that Indigenous Peoples in Perú constitute a relative majority – and that Perú is one of only a handful of countries where this demographic advantage holds – the lack of a national-level representative organization has led to claims of

²¹ In June 2009, sixty-five days of civil disobedience in the Amazon ended with the government's suspension of civil liberties under a state of emergency, followed by military intervention that left approximately twenty-two soldiers and more than thirty Indigenous protesters dead – including Indigenous children (Powless, 2009).

extreme Indigenous organizational weakness, bordering on complete political absence (CIA, 2009; García, 2003; García & Lucero, 2007). There is, in fact, not even a regional (never mind national) organization representing the highland Quechua or Aymara (Oliart, 2008). Perú thus stands as a curious exception to the successful Andean Indigenous mobilization exemplified by neighbouring Bolivia (whose President is Indigenous) and Ecuador (where the major Indigenous political party has participated in the ouster of at least three heads of state) (Dean, 2002b; García & Lucero, 2008; IPS, 2006; IWGIA, 2011a; MRP, 2003). Further, the most recent analyses of this ‘Peruvian exceptionalism’ predict that the influence of Indigenous political organizations has actually peaked and is now in decline (DeShazo, 2009). The proclamations of an ‘Indigenous absence’ in Perú have become pervasive enough to prompt noted academic Luis Millones to ask, “is there a country between Ecuador and Bolivia without indigenous people?” (Millones, 1999, as cited in García, 2008). Similarly, when queried about where the Indigenous movement was in Perú, prominent *indigenista* intellectual Javier Lajo famously replied, “[it’s] in Ecuador and Bolivia” (as quoted in García & Lucero, 2007, p. 242).

Colchester (2003) seeks to explain the lack of national mobilization by crediting the brutality of agricultural servitude with a legacy of Indigenous passivity – but this hypothesis seems to raise more questions than it answers. Historically, the state certainly has not seen the Quechua and Aymara as ‘absent,’ particularly in its policymaking and nation-building efforts, which Indigenous groups have consistently disrupted (both intentionally and incidentally). Southern Perú, in particular, has always been a rebellious region, the scene of no less than thirty-seven uprisings in the late 18th century alone (Mannheim, 1984). The four hundred years of oppression on *latifundios* (agricultural estates) that Colchester references were actually brought to an end by Indigenous occupations and insurrections, rendering his conclusion counterintuitive, while this forceful resistance segued into an equally vigorous struggle for land access in the 1950s and 1960s (Kapsoli, 1982, as cited in Figueroa & Barrón, 2005). Since the post-WWII agricultural and land reforms,²² though, collective Indigenous action has almost certainly

²² The fact that Velasco’s land reforms were truncated (thanks to, *inter alia*, his overthrow by more conservative military officers) has meant that the Indigenous agrarian communities remain precarious vis-à-vis control of their territories; further, promised repatriation of Indigenous communities’ lands was wan

been reduced in both scale and scope by a parade of stifling circumstances and abrupt shifts in the political landscape (Figueroa & Barrón, 2005). To begin with, a series of increasingly conservative military governments (1962-1963 and 1968-1980) initiated grand projects of rural transformation and modernization intended to solve the ‘Indian problem’ (García & Lucero, 2008). Although a practical failure, these initiatives did manage to inculcate distrust, competitiveness, and animosity between Indigenous groups (Paredes, 2008). A return to procedural democracy in 1980 coincided with the rise of *Sendero Luminoso* and the *Movimiento Revolucionario Tupac Amaru*, so that the last two decades of the 20th century were marked by extreme violence and political oppression. Dean (2002b) describes the 1990s – a span bracketed by Alberto Fujimori’s dictatorship – as a ‘lost decade’ for Indigenous Peoples in Perú, who were either actively targeted or collaterally damaged by rampant corruption, torture, suppression of free speech, arbitrary persecution, and extrajudicial killings, carried out by both sides in the conflict (García, 2003).²³ Indigenous leaders were murdered and the spaces for political association and agitation shut down, while guerrilla activity in the *altiplano* and rainforest lent surface credence to government claims that *any* opposition in Indigenous regions was congruent with terrorism (García, 2003; Paredes, 2008; Van Cott, 2005). That atmosphere of fear and intimidation persisted until at least the turn of the millennium, both validated and spurred by repressive legislation, (as noted in CERD’s 1999 report to the UN General Assembly) (García & Lucero, 2007).²⁴

Ultimately, claims of Indigenous absence tend to focus on the lack of national political party formation, assuming that effective political activity inevitably aims for

and structural support to rural agriculture never materialized, with the fallout of these broken promises still being felt today (Colchester, 2003; Fernandez, 1998a; García & Lucero, 2008; ILO, 2011).

²³ In the period during and leading up to the war both politicians and *Sendero Luminoso / Movimiento Revolucionario Tupac Amaru* made use of the cultural divide in Perú, diverging only in terms of “which side they thought needed to disappear – whiteness and modernity, or the backward Indian” (Weismantel, 2006, p. 88). Both sought to “inculcate an atmosphere of terror” in Andean communities (García, 2003, p. 73).

²⁴ The Committee wrote that, “[i]t is also worrying to learn that people who are in fact subjected to all sorts of pressure, from both subversive groups and the forces of law and order, are being charged with aiding and abetting terrorists. Allegations have further been made that indigenous communities are being forced to set up self defence committees under the armed forces and that young people from the most underprivileged sectors of the population are being conscripted by force. [...] The Committee takes note of reports that the indigenous population, the members of which often have no identity papers and are illiterate, is thus deprived of the possibility of exercising its civic and political rights” (CERD, 1999, p. 3).

control of the state apparatus – and this particular form of ‘Indigenous absence’ is comparatively easy to explain. Van Cott (2005) draws attention to the fact that Andean communities do not often command the resources necessary to meet the price of registering and supporting a political party in Perú, costs which are exacerbated by the tremendous distances and challenging terrains that must be crossed to collect signatures from towns and villages in the Andes. These barriers add to the fact that, particularly after 1990, Peruvian politics moved almost exclusively through clientilistic relationships, which reinforced pre-existing privilege at the regional and national levels (Paredes, 2008). Even participation in the electoral system as an Indigenous *voter* is hampered by structural impediments: procedures are complex, information is seldom translated into Quechua or Aymara, and many Indigenous persons still lacked identity documents as late as the opening years of the 21st century (Van Cott, 2005). Further, an overwhelmingly inclusive issue – such as the fate of *kuka* (coca), a crop with tremendous economic and cultural significance²⁵ that united Indigenous *cocaleros* in neighbouring Bolivia – has not (yet) emerged to delocalize Quechua identity in Perú (Montoya, 1998; Van Cott, 2005). The Indigenous movements that have arisen have tended to focus on an urgent issue and then shift to others, developing particular agendas according to their own logic (for example, alliances against the encroachment of resource extraction industries in the *selva* and *sierra*) (Oliart, 2008; Van Cott, 2005). This scattered political project of “strategic adaptation” is, according to García & Lucero, what has passed for absence in mainstream and ‘outsider’ eyes (García & Lucero, 2004).

²⁵ *Kuka* is a sacred plant with, in addition to ceremonial uses, myriad medicinal applications – it provides important diet-enriching vitamins and minerals; is an effective treatment for hunger and thirst, altitude sickness, and fatigue, and pain (Allen, 1981; Bolin, 2006). Ceremonially, it mediates between living humans, the ancestors, animals, and spirits (Bolin, 2006). There is still a widespread misconception about the difference between *kuka* and cocaine (its better-known derivative), both abroad and among Latin American elites at home – despite the fact that, as Ereia (1991) wryly noted, *kuka* and cocaine are as dissimilar as rye bread and rye whiskey. Socially, *kuka* is used to seal contracts, accompanies requests for *ayni* or any formal request (including of the *paqo*), and signals acceptance or rejection of *kargu* (including community office) (Allen, 1981; Gifford & Hoggarth, 1976).

El Parque de la Papa **Background & Context: Life in the Sacred Valley**

The *Parque de la Papa*, located in the Urubamba Valley (*el Valle Sagrado de los Incas*) outside Qosqo, covers 25,000 hectares of cultivated and uncultivated land between 3,150 and 5,000 masl (ANDES, 2011a; CIP, 2008b). Habitation in this area dates back at least three millennia; in the intervening centuries *Runakuna* and the *tirakuna* have co-evolved, nurturing and being nurtured by one another (Argumedo, 2010; Argumedo & Wong, 2010). The last comprehensive census, taken in 1992, reported four thousand persons, virtually all of them Indigenous, living in the *Parque*'s six confederated villages (Sacaca, Chawaytire, Pampallacta, Paru Paru, Amaru, and Cuyo Grande) (Argumedo & Wong, 2010). The constituent communities rank fourth in national metrics of extreme impoverishment and sixth in measures of absolute poverty (Argumedo, 2010). These statistics, though – however technically accurate – do not describe the whole picture, since in these communities the main economic activity is traditional, subsistence agriculture and animal husbandry, with which market-oriented metrics do not adequately grapple. The Quechua of the *Parque* have been cultivators of this land for generations upon generations, and their strategies not only predate, but also thwart the primacy of the cash economy.

Of the 235 domesticated species and 4,000 varieties of *papa* in the world, the *Parque* contains (respectively) 8 and 2,300, in addition to about twelve percent of known wild species (Argumedo, 2010; Argumedo & Wong, 2010). Most of these varieties are unique to the particular habitats of the communities' *chakra*, which *El Centro Internacional de la Papa* (CIP) (2008b) has interpreted as evidence that the *Parque de la Papa* could well be a minor centre of origin of this food crop. In fact, the genetic ancestor of all of the world's potatoes has been identified as a wild tuber that flourished in the alluvial valleys surrounding present-day Qosqo, the very spot where the *Parque* is located (Dowie, 2008). The communities started with just 770 varieties and have steadily increased that number through a combination of means, traditional and innovative, both alone and in partnership with research institutes and conservation authorities. Because of the number of unique undomesticated landraces – including the largest number of *papa*

atoq (wild potatoes) in the world – the local area is also considered a critical genetic reservoir of crop wild relatives (ANDES, 2011a; Argumedo & Pimbert, 2005).



Parque chakra and the valley leading out to Písaq, seen from the Visitor's Centre in Sacaca

In addition to *papa*, the communities' *chakra* contain many other Andean native foods, including tubers (*papalisa*, *maswa*, and *oca*), legumes (*hawas* and *tarwi*), and grains and pseudograins (*sara*, *kinwa*, and *kiwicha*). Introduced, non-native species are grown too, principally *llunka* (wheat) and *siwara* (barley). Agriculture also satisfies much of the local need for wool, medicines, building materials, and fuel (Argumedo, 2010; Argumedo & Wong, 2010). 'Eco-corridors' link cultivated land with the other habitats contained in the *Parque*, such as forests, grasslands, and wetlands, permitting a flow of both genes and 'ecosystem services'²⁶ (Argumedo & Pimbert, 2005). At this altitude animal husbandry complements crop cultivation, as many of the residents keep Andean camelids (principally *alpaca* and *llama*), *qowi* (guinea pig), *uyja* (sheep), and smaller numbers of *waca* (cattle) (Argumedo, 2010; Argumedo & Wong, 2010). Indeed,

²⁶ Ecosystem services are the benefits (other than food, fuel, and other materials) obtained from ecosystems, provided by their constituent plants, animals, fungi, and microorganisms – for example, water purification, crop pollination, and soil enrichment (Hassan, Scholes, & Ash, 2005; IUCN, 2011).

in the Andes the term *chakra* can and does refer to anything and everything that is nurtured, so that farm animals are ‘the chakra that walks’ (Rengifo, 2005, as cited in Gonzales & Gonzalez, 2010, p. 96). Like most other rural agricultural villages in the Peruvian *altiplano*, the communities of the *Parque de la Papa* were a part of the country’s feudal farming system until post-agrarian-reform legislation allowed them to cease merely labouring on, and actually own the land, beginning in the 1970s (ANDES, 2005).

Founding & Footing of the *Parque*

Work on the conceptual underpinnings and actual logistics of the *Parque* began in 1997, under the leadership of the *Asociación para la Naturaleza y el Desarrollo Sostenible* (ANDES), a Qosqo-based, registered Peruvian NGO.²⁷ The *Parque de la Papa* officially opened in 2000 (Argumedo & Pimbert, 2005). This was one of the organization’s earliest undertakings, as ANDES itself was founded only a year prior to beginning work on the initiative; while the organization remains the principal partner of the confederated communities today, having worked diligently to build mutual trust in the intervening years²⁸ (Argumedo & Pimbert, 2005; Muller, 2009; Murphy & Townsend, 2010). Starting out with no funding and a strictly volunteer staff, ANDES’ founder, Canadian-educated Quechua agronomist Alejandro Argumedo, quickly capitalized on his prior experience in Indigenous advocacy²⁹ to build connections with local villages, academics, international nongovernmental organizations (INGOs), government offices, and funding institutions (Argumedo & Stenner, 2008; Dias & da Costa, 2008). Today, ANDES is led by a steering committee largely made up of representatives of Quechua communities, and describes itself as rooted in Indigenous traditional principles and

²⁷ ANDES is a ‘non-profit civil association,’ listed on the Registry of Associations of the Public Registries of Cusco (1995) and recognized by the Peruvian Agency of International Cooperation (Argumedo & Stenner, 2008).

²⁸ The communities retained the right to control pacing and prioritizing the project work undertaken, the flow of information in and out of the *Parque*, and ultimately which activities would be undertaken and which would not (Argumedo & Pimbert, 2005).

²⁹ This experience includes holding a position as Vice-Chair of Indigenous Affairs for The World Conservation Union, coordinating the Indigenous Knowledge Programme, and acting as Executive Director of Cultural Survival Canada.

structured according to both Indigenous and Occidental organizational models (necessary for working within the legislative framework and policy environment of the Peruvian state) (Argumedo & Stenner, 2008; Swiderska, 2006). Funding for *Parque* projects, typically administered by ANDES, has come from a variety of international sources, including nongovernmental organizations, universities, private foundations, and international financial institutions.³⁰ As Murphy and Townsend (2010) note, “[h]ere, Indigenous tradition has been combined with the Western world of NGOs and small business.”

Under ANDES’ guidance, the *Parque* was conceptually anchored in traditional resource rights, a conceptual scaffold that undergirds the majority of the work of both the communities and ANDES even today (ANDES, 2005). Darryl Posey, who helped to coin the term, describes ‘traditional resource rights’ as:

an integrated rights concept that recognizes the inextricable link between cultural and biological diversity and sees no contradictions between the human rights of indigenous and local communities, including the right to development and environmental conservation. Indeed, they are mutually supportive since the destiny of traditional peoples largely determines, and is determined by, the state of the world’s biological diversity. TRR includes overlapping and mutually supporting bundles of rights [...]. TRR go beyond other sui generis models in that they seek not only to protect knowledge relating to biological resources but also to assert the right of peoples to self-determination and the right to safeguard ‘culture’ in its broadest sense. (Posey & Dutfield, 1996, p. 95)

The *Parque de la Papa* was also inspired by the idea of an integrated landscape conservation model based on the International Union for Conservation of Nature (IUCN) Category V Protected Areas, an approach to conservation that focuses on “large-scale bioregional landscapes with interwoven natural and cultural resource values held by associated cultural groups who have interacted with the place over time” (Phillips, 2002, p. 14). Externally, the *Parque* has been described as an Indigenous and Community

³⁰ These include, *inter alia*, the Sustaining Local Food Systems / Agrobiodiversity and Livelihoods Programme of International Institute for Environment and Development, the Rockefeller Foundation, the World Bank Development Marketplace, the Global Crop Trust, the International Potato Centre, the University of Wisconsin, and the Brandston Seed Company. Colchester (2003) reports that the *Parque* is also backed by an International Support Committee that counts among its members the Executive Secretary of the CBD, the ex-Minister for the Environment in Colombia, film stars, and human rights activists.

Conserved Area (ICCA), which the IUCN defines as a “natural and/or modified ecosystem containing significant biodiversity values and ecological services, voluntarily conserved by (sedentary and mobile) indigenous and local communities, through customary laws or other effective means” (WPC Recommendation V26, 2003, as cited in Corrigan & Granziera, 2010, p. 1). ICCAs include “cases of continuation, revival or modification of traditional practices or new initiatives taken up by communities in the face of new threats or opportunities” (Argumedo & Pimbert, 2005, p. 7). Unlike in most ICCAs, though, much of the critical *biodiversity* here is specifically *agro-biodiversity* (Argumedo & Pimbert, 2005).

Another difference – indeed, a key departure from existing conservation models – is that the *Parque de la Papa* was created to nurture and support not only the physical landscape, but also the society and culture that are as bound to that landscape as its native flora and fauna. More than ‘habitats,’ the focus here is on ‘systems,’ the complex interrelationships between physical, biotic, and cultural environments that sustain communities, human and nonhuman alike. The *Parque* model recognizes and strives to give form to the mutuality of landscapes, economies, and social/governance systems in Indigenous societies, and focuses on all three in a holistic programme for endogenous local flourishing. Principal aims are the reduction of material poverty and enhancement of economic equity and viability; the fostering of simultaneous contemporary relevance and historical continuity in cultural practice, customary laws and institutions, and traditional knowledge (TK); the promotion of wild and cultivated Andean biodiversity and maintenance of native plant and animal species in their original habitats; and the assertion of group rights to territory and resources, along with the local management of communal lands for collective benefit (including advocating for more supportive policy environments and the repatriation of alienated material heritage, TK, and associated innovations) (ANDES, 2005; Argumedo, 2008; Argumedo & Pimbert, 2006; Colchester, 2003). As well as a unique expression of what is broadly referred to as ‘conservation’ and ‘development,’ the *Parque de la Papa* also qualifies as a *sui generis, in situ* protection mechanism for those Andean lifeforms and elements of Quechua Indigenous knowledge now coveted by bioprospectors (ANDES, 2005; Taylor, 2008).

Perspectives on *Papa*

Papa as Culture

Because its residents are principally engaged in subsistence agriculture, the *Parque* is first and foremost a protected space in which Andean crops can be sustained, adapted, safeguarded, cultivated, consumed, and exchanged, by the communities themselves, according to Quechua customary law and through giving priority to traditional agro-ecological practices and knowledges. The park is, ultimately, “a working, living and culturally unique food system” (Argumedo & Pimbert, 2005, p. 7). The name *Parque de la Papa*, of course, denotes a special emphasis on the *papa*, in recognition of its status as a powerful symbol of Quechua identity, a cornerstone of Indigenous life in the Andes, and a native plant whose ancestral home coincides with their own. Andean farmers – and increasingly, Peruvian consumers – are very attentive to subtle, complex variations in the tuber’s flavour, texture, and visual aesthetics. Accordingly, as Dowie (2008) notes, “Peruvian markets are museums of potato variety.” Even their consumption is marked by incredible diversity: *papa* is found in stews, desserts, snacks, and on its own; it thickens, binds, and provides texture to soups, breads, and casseroles; it is cooked in earthen ovens, urban kitchens, and upscale restaurants – baked boiled, fried, toasted, steamed, and dried; and it takes the lead in both traditional Andean and modern fusion (*‘Novoandina’*) cuisine.

Like the other elements of creation in the Quechua universe, every *papa* is considered a person, a relative of the farmer (Silberner, 2008), “complete and indispensable, with its own inalienable way of being, with its definite personality, its own name, with its specific responsibility in keeping the harmony of the world” (Fernandez, 1998b, p. 224). The *q’achun waqachi*, ‘the one that makes the daughter-in-law weep,’ tests the skill level (and frustration threshold) of a prospective bride, who must peel its deeply grooved, bulbous surface without damaging the flesh underneath (Dias & da Costa, 2008; Dowie, 2008). *Chillka*, almost candy-like in its sweetness, is served as a treat at weddings and birthdays, while the more subtle sweetness of *yana bole* curbs the acidity of soups and stews. *Ttalaco*, curved like a banana, rather than being cooked is always distilled. *Ohasito* contains a chemical that combats depression. *Moro boli*’s

impossibly vibrant hue corresponds to its high antioxidant content, as does *oke suito*'s more subtle tones. Purple *suamanchachi*, with the same silhouette as a crouching human, scares away thieves; and *pumamaki*, the 'puma's claw,' is said to have chosen its own shape after teaching the wild cat a lesson in respect.³¹ There are varieties that resemble pears, closed flowers, animals, pinecones, fish (complete with scales), bunches of grapes, belts, boomerangs, and balls of twine; in shades of purple, violet, green, gold, red, black, brown, blue, and white; streaked, splotted, and whorled with colour.



Display of a small handful of the papa varieties grown in the Parque

In some areas, for certain occasions, *papa* may be given as a gift, particularly to celebrate the first haircutting of a male child or as a gesture to a godparent-to-be (GRAIN, 2000). Moche, Huari, and Chimu ceramics, as well as Inkan artwork, depict both *papa* and its cultivation, each recognizing the exceptionality of a crop that thrives at the extreme margins of human environments, and which found a home in every niche of their vast, diverse territories – they are, in fact, possibly the highest altitude food crop in existence (Argumedo, 2008; GRAIN, 2000; von Hagen, 1957). For the Quechua, potatoes are living, sentient beings who express emotion. Even 'bad' seeds are planted

³¹ The puma, wishing to lie down where the *papa* was growing, would not heed the *pumamaki*'s warning to let it alone.

with the rest, out of sympathy for their potential loneliness – further, the first tubers planted go into the ground accompanied by *kuka* leaves, so that they may successfully undertake *wachanqanku* (birth) (Allen, 1982). As Quechua agronomist Alejandro Argumedo notes, “[p]otato is not just food. Potato is also spirituality; it’s culture. [...] There are songs, dances, ceremonies. So this is a potato land, a culture of potato” (as quoted in Silberner, 2008).

Potato as Science

With tubers like *papa*, which can reproduce asexually through a process that amounts to natural cloning, the failure of one crop usually means the loss of the subsequent year’s propagating material (Bolin, 2006). As a result, potatoes are, globally, the food crop most reliant on chemical inputs to deliver nutrients and prevent disease, as well as being exceptionally susceptible to environmental stresses (GRAIN, 2000). A single pathogen, late blight (*Phytophthora infestans*) wiped out almost every European potato in 1845, causing the deaths of two and a half million people and the removal of another million from their homelands. Today, industrial farmers spray every 3-20 days with Novartis’ metalaxyl in order to prevent the loss of entire fields. Despite this fragility, the potato is the world’s fourth most important plant-based food; its fastest growing staple; and a highland subsistence crop on every continent, the global production of which now stands at 300 million tons annually (Dowie, 2008; Nelson, 2008). That figure has been purposefully inflated, thanks to the potato’s ability to render more calories and protein per unit of land and water than any other major food crop; its propensity to flourish on marginal land that will not support other crops; and the fact that the more widespread varieties can produce in less than two months (GRAIN, 2000).

The Quechua divide cultivated potatoes into roughly two types: higher and lower altitude. *Papa haya* thrive at between 3,700 and 4,100 masl, and contain bitter tasting, even toxic glycoalkaloids that allow them to withstand the frosts that bloom there through the night (NRC, 1989). Andean Indigenous Peoples have devised an ingenious processing technique for this otherwise inedible crop, removing the toxins and extending the storage life of the tubers, by naturally freeze-drying *papa* to produce *ch’uñu* or

moraya. *Papa mukhuna* or *papa miski* are acclimated to lower elevations (2,500 - 3,700 masl) (Brush, 2000). In terms of varieties within each type, a single Quechua *chakra* may contain as many as three hundred (Stolton, Maxted, Ford-Lloyd, Kell, & Dudley, 2006). Only in the Andes is such an overwhelming diversity still grown – the rest of the world depends on a single species (*Solanum tuberosum*), while the Quechua cultivate at least nine (made up of thousands of individual varieties³²), with *papa atoq* providing another 226 species to the gene pool (Andersen & Winge, 2008; Farmers' Rights, 2006/2007; GRAIN, 2000; Muller, 2006; Stolton, et al., 2006). These native varieties have a nutritional content far superior to the potatoes available in North American and European grocery stores (Muller, 2006; Salazar, 2008).³³

When *Phytophthora infestans* hit European and North American potato agriculture almost two centuries ago, the astonishing diversity of Andean *papa* meant that blight-resistant cultivars, developed over millennia by Indigenous farmers, could be used to control the pathogen's spread. Still today, traditional agricultural knowledge allows Quechua farmers to create polygenic resistance to multiple infections and infestations right in their own *chakra*. Non-Indigenous breeding programmes, centred in university labs and government research facilities, are finding it challenging to better this traditional knowledge. Even the most successful have produced only single-gene resistance traits, leaving farmers heavily dependent on expensive and hazardous corporate agro-chemical inputs (GRAIN, 2000). The 'cosmopolitan' potato species – the one the world currently relies on – is tetraploid, meaning that it has twice the genetic material of most other plants (44 chromosomes total). This creates greater opportunity for hybridization and beneficial mutation, but also means that it can take up to a quarter-century to develop a new variety (GRAIN, 2000). When hybridization is attempted with wild landraces the process is even more complex, since those relatives of the potato may have two, four, or

³² Sources differ dramatically in their reported numbers of cultivated varieties, from 1,200 (Stolton, et al., 2006) to 2,000 (CIP, 2005) to 4,000 (Dowie, 2008). Some of this confusion results from the difference between 'domesticated' and 'wild' *papa*, since the Quechua may or may not acknowledge such a distinction, as they tend to harvest species that outsiders view as non-cultivated and 'weedy.' Worldwide, including these undomesticated landraces, there are approximately 6,500 potato varieties (Farmers' Rights, 2006/2007), of which the International Potato Centre (CIP) in Lima asserts that 80% can be found in the Andes (GRAIN, 2000) (Rivera, 1998, p. 67).

³³ In particular, Andean *papa* landraces and cultivars contain significant amounts of vitamins C, and B, potassium, magnesium, and phosphorous, as well as the recent discovery of secondary metabolites (non-essential organic compounds) of potential medical significance (Salazar, 2008).

even five complete sets of chromosomes. As a result, breeding programmes are time-consuming and complicated (GRAIN, 2000) – while much is at stake in their outcomes. This explains why the Andean *chakra* has been, for at least half a century, of intense interest to plant geneticists, and why biopiracy is today a leading concern of Quechua farmers.



Tubers of q'achun waqachi in the Parque de la Papa

Papakuna as Politics

Most of the great abundance of Andean *papa* varieties are not commercially available, but continue to play a significant role in Andean Indigenous subsistence agriculture and to figure prominently in Quechua barter markets. They are the product of traditional agro-ecological knowledge and natural selection, as Quechua farmers apply and adapt the technology of their ancestors in concert with the forces of nature, in a

symbiotic process dating back at least 8,000 years (CIP, 2005; Nelson, 2008). Over the millennia since its first introduction into Andean *chakra*, *papa* has remained “the daily bread of the Andes” (Murphy & Townsend, 2010). Reliance on these time-tested and creative/adaptive technologies allows contemporary Quechua to cultivate *papa* using few-to-no chemical inputs, capitalizing on the genetic diversity of the plant (which no other major food crop shares), and through these means to be able to turn down agricultural aid and rural development technologies coming out of the industrial model and state ambitions (GRAIN, 2000). These farmers also rely on the exceptional nutritional status of the tuber – Guillet *et al.* (1983) note that the energy expenditure entailed in Andean agriculture is so intense that only the densely packed, uniquely combined macronutrients found in the native *papa* allows it to balance in the positive. For the communities here, the choice of the Andean *papa* as a ‘flagship’ species, to both anchor and represent their efforts, was obvious (ANDES, 2011a). As ANDES’ Director has asserted, “[w]e realized this isn’t just about potatoes, but the entire world that exists around the potato. The struggle to preserve the potato is connected to the struggle of communities all over the globe to protect their agricultural biodiversity and continue feeding themselves” (as quoted in Murphy & Townsend, 2010).

Conceptual Framework

The question of in what life itself consists drives every normative human endeavour. This query undergirds assessments of what is good, just, and worthy of perpetuation; and conversely, of what is lacking, what ought to happen to correct that dearth, and why. Different answers to these questions are founded upon distinct views of human nature and purpose, time and space, legitimate authority, agency and autonomy, the principles that should guide interaction, and the substance of the material world and how it may be apprehended – all of which combine to produce a particular idea of ‘the good life.’ Any thick conceptualization of this ‘good life,’ of what is necessary to foster flourishing, is deeply rooted in place. An attempt to understand Quechua processes, therefore, must proceed through Andean perspectives, to the greatest extent possible, or else risk both misplotting the path and misjudging the destination. In other words: the

strategies developed and deployed by the communities of the *Parque de la Papa* cannot be understood by approaching them as a set of *ad-hoc* tactics; they gain coherence only by viewing them as negotiated products of a Quechua conceptual frame. That frame is made up, roughly, of an Andean cosmology, teleology, and morality; which engender particular views of authority, society, and relationality. The way in which these components enmesh with and give rise to one another is central to the task of substantively comprehending and fairly assessing the work of the communities of the *Parque*.

Cosmology: The Andean Universe of Space & Time

The world – the *pacha* – is actually a temporal and spatial unity made up of three distinct, immense, interconnected realms: *hanan pacha*, the uppermost, where sky entities reside; *kay pacha*, the world that holds the *Runakuna*; and *ukhu pacha*, the world below, where fertility spirits and the dead dwell. Ishizawa and Rengifo identify *pacha* as “a territory of ritual and plastic boundaries, which is nurtured by the human community that inhabits it while the *pacha* simultaneously nurtures that community” (2009, p. 65). *Kay pacha*, the world of here and now, is seen as ever in flux, “a plane of destruction and recreation, as it moves toward the perfection of mankind” (Bákula, Minelli, & Vautier, 2000). In the Andean *pacha*, the measure of time is circular, moving as and with the agricultural round of planting, harvesting, resting, and renewal (Gonzales, et al., 2010). Events may punctuate this circuit, but they do not determine it; neither do phenomena occur in isolation, but as part of a synthesis that flows, ebbs, and regenerates. This Quechua ‘synthetic principle’ runs through both time and space, unifying the two, ordering the physical, spiritual, and mental into an integrated Andean environment (Urton, 1981). In expressing time and space, events and places, Quechua use the concepts *qhepa* (for ‘future’ and ‘back/behind’), *ñawpaq* (meaning both ‘past’ and ‘ahead/in front’), and *kay* (the ‘present’ and ‘here,’ as in *kay pacha*). One consequence of such a perspective is that the same term is used for ‘ancestors’ and ‘descendants:’ *ñawpaq Runakuna*. This is more than a linguistic oddity; it is a thoroughgoing conceptual frame.

Cycles and circles also describe agricultural, socio-political, and ecological concepts and practices (Goland, 1993). In the Andean world, crops are rotated among *chakra*, while *chakra* are rotated through the landscape; ‘offices’ (*kargus*) are rotated between members of the community; the constellations, shepherded by *inti* (the sun) and *killya* (the moon), rotate through the heavens; the weather phenomena known as *el Niño* and *la Niña* rotate through successive decades; rotation of images and sounds make up musical compositions and weaving patterns according to Andean aesthetics; and domain over different elements of *allin kausay* (physical well-being) is rotated between the encircling *apu* (mountain protectors). Circularity does not imply simple repetition, though; for example, no two agricultural years – further, no two wet years, even no two wet *el Niño* years – will be the same. Consequently, ceremonial and productive activity in the *chakra* occurs not according to calendar dates but arises from a dialogue between the weather, the land, the spirits, the past (as instruction, inheritance, and experience), and the farmer (Gonzales, et al., 2010). Andean agriculturalists,

‘read’ the climate, and shifts in the climate, on the land; by examining flowering patterns, plant strength and height, and fruiting cycles for example, as well as the colour of reptile and amphibian skins, the presence, nesting behaviours, and flight patterns of birds; the presence and abundance of certain species of fish, and the behaviour of certain insects (particularly crickets and ants); also meteorological activity, and dreams and divination. [...] The soil will ‘ask’ to be let rest or brought into cultivation by giving rise to certain kinds and numbers of wild plants, while other signal plants will reveal whether a plot of land will be suitable for growing maize versus potatoes. [...] According to his or her dialogue with the ‘signs’ of the climate and soil, the peasant can say which soils are suitable for sowing, what tillage methods are best to use, what species to cultivate and even when it is best to plant. (Rivera, 1998, pp. 64-65)

Generally, sowing is from August through November, while harvesting takes place from April through June (Mazess & Baker, 1964), but timing ultimately depends on the signs (or statements) given and how they are interpreted (Gonzales, et al., 2010). *Raymi* (festivals) serve to both celebrate and calibrate each successive cycle.



Above and below: apu protecting the plains of Chinchero, Qosqo province



A direct correlation has been found between the cultivation of traditional Andean crops and the incidence of traditional Andean beliefs (Swiderska, Argumedo, et al., 2006). This finding is hardly surprising when considered in light of the fact that the

fundamental value in Quechua societies – the value on which all others hinge – is life itself. As Salgado notes, “the essence of life is the Pachamama [and] [s]ince everyone and everything come from the Pachamama, the main dedication is to nurture life in all its forms” (2010, p. 201). *Pachamama* is often glossed as ‘Mother Earth,’ and the enshrining of her rights as such in the Ecuadorian constitution certainly helped to introduce this particular definition to the world at large. Some academics endorse such an interpretation, asserting that it is literally true:

To live in the Andes, one does not need representations. In this mode of being, Pachamama is not only the mother of the land, but this person is also experienced as our mother. When we say it like that, in the circumstances in which we allude to her we are not using a symbolic language – a language that personifies – nor are we using metaphor. (Rengifo Vásquez, 1998, p. 95)

Most other explanations depart from this simplicity, focusing on the omnipresence of *Pachamama* in both the temporal and spatial sense. Bolin, for example, refers to her as “the universe of space and time” (2006, p. 114). She is “sacred and alive,” thereby giving rise to “the living Andean world” (Gonzales, et al., 2010, pp. 189-190). More abstractly, *Pachamama* is “‘undifferentiated ground,’ not localized in any one place” (Allen, 1981, pp. 161-162), yet possessing a sentience and agency that manifests as the ethical interactions between communities of humans and communities of other lifeforms (Rist, Burgoa, & Wiesmann, 2003). In an agrocentric culture, those ‘ethical interactions’ are made up, in large part, of subsistence activity on the land. Accordingly, *Pachamama* is asked for permission, through offerings and pledges, during both planting and harvesting – even, in fact, in preparing fields for the sleep of fallow (Rivera, 1998). Yet to say that she *is* the land (some interpretations equate her with the concept of an ‘ecosystem’) risks the reader reducing her to her biophysical elements, ignoring the emotional and spiritual aspects of her being. Going further (perhaps in the wrong direction), Gade (1975) describes *Pachamama* as actually separate from the land – as do many other academics who graft Occidental ideas about deities onto Andean ones – saying that she supports the well-being of the physical landscape, and that this stewardship function explains Quechua

reverence for her. This separation, along with the utilitarian view it pivots around, is artificial.



The breasts of Pachamama carved into the valley floor in Urubamba, Qosqo province

Unlike their Inkan ancestors, who could speak with *Pachamama* directly and herd the very rocks into monumental edifices, Quechua now communicate with her through the spiritual conduit of *kuka* (Allen, 1981). *Kuka* is also offered to the *apu*, the mountain protectors sometimes referred to as *runa michiq* ('pastors of men') or *uywaqninchis* ('the ones who nurture us'), and other times simply called 'grandfather' (Allen, 1981; Rengifo Vásquez, 1998). It is the *apu* who properly own a community's llamas and alpacas, sacred creatures in their own right, merely loaning them to the shepherds (Rivera, 1998). The most powerful *apu* are snow-capped, water being the ultimate source of life, especially in a climate that constitutes a high desert for half of the year. Each peak has a name, a role, a genealogy, and a community it watches over, where it inculcates harmony, guards the health of the *Runakuna* and animals, and directs the weather (Allen, 1981; ANDES, 2005). Traditional knowledge, including agricultural knowledge, comes from *Pachamama* and the *apu*, as well as other *tirakuna*. Some is acquired through conversations between farmers and the soil, rain, and seed; while rules about its use come

from a different kind of interchange, that between *paqo* (shamans), *apu*, and *Pachamama* (ANDES, 2005). This attribution of linguistic capacity to everyone and everything (though such a distinction is, of course, foreign) is a central element of the Andean cosmovision (Gonzales & Gonzalez, 2010; Stadel, 2001). In terms of this human/non-human discursivity as an element in securing the physical sustenance of communities: here “agriculture is ritual,” writes Rivera, “meaning a nurturing, deeply respectful way of growing” (2008, p. 196). These activities and interchanges, like all substantively/self-consciously Quechua activity in the *altiplano*, trace an Andean conceptualization of the purpose of human life.

Teleology: ‘Living Well (but not Better Than)’

Over the past several years, an ideology emanating from Andean communities has begun to garner serious academic, political, and journalistic attention: *vivir buen* or *buen vivir*,³⁴ which appear in the English-language literature as ‘living well’ or ‘well-living’ (Bizerra, 2009; Salgado, 2010). This newfound attention is attributable to the term appearing as the unifying theme of two separate Constitutions – inclusions that, in addition to being politically unprecedented, came in rapid succession (Chuji, 2009; Salgado, 2010). As of 2008, the state of Ecuadorian “recognizes the right of people to live in a healthy and ecologically balanced environment that ensures sustainability and well-living, his *mak kawsay* [a good life];” while in 2009 Bolivia asserted that its own state, “assumes and promotes the ethical and moral principles of a plural society: [*suma qamaña*], [to] live well” (CAB, 2009; NAE, 2008).³⁵ Thus, after more than five centuries of invisibility, “an idea from the vocabulary of peoples formerly totally marginalized, excluded from respectability, and whose language was considered inferior, uneducated, incapable of abstract thought, primitive [...] now enters two constitutions” (Tortosa, 2009, p. 3).

In discursive investigations, though, ‘living well’ (or ‘good living’) is an Anglicized version of a Hispanicization of the Quechua *sumaq kausay* – and

³⁴ The former phrase is more common in Bolivia, the latter in Ecuador.

³⁵ Note that *suma qamaña* is the Aymara equivalent of the Quechua *sumaq kausay*, while the Runasimi dialect that predominates in Ecuador yields *mak kawsay*. These three terms are conceptually equivalent.

unfortunately, in this series of linguistic shifts, attempts to gain understanding through simple translation actually obscure the subtle ideas bound up in the original phrase. They do so by infusing the term with the Western European notion of ‘the good life’ (in either the hedonistic or Aristotelian sense), or else by limiting its spiritual and cultural foundations to universalize a purely reactionary, anti-capitalist ideology. Even direct translations of *sumaq kausay* should proceed more cautiously. A good beginning would be with the undeniably aesthetic and emotional connotations of the first term – *sumaq* – which can mean both ‘beauty’ and ‘tenderness’ (Carreño, 2006). And while *kausay* on its own is a more straightforward word – ‘living’ or ‘life’ – when coupled with *sumaq* it gains notions of ‘mutuality’ and ‘solidarity’ (Salgado, 2010). Cultural lenses further complicate the attempt to understand the breadth of the concept, since ‘beauty’ is contextual, and in the Andes it has a strong non-visual component. What is ‘beautiful’ here exhibits balance or takes part in what is harmonious; further *sumaq*, as a condition of living beings in a shared world, is necessarily rooted in respect, mutuality, and nurturing. And finally, linguistic particularities compel an understanding of the phrase as employing the Quechua progressive tense, so that whatever the specific definition deployed, *sumaq kausay* “is being raised gradually, in a continuing and enduring fashion” (Salgado, 2010, p. 201). This momentum is neither evolutionary nor comparative, though: from the Quechua perspective, ‘living well’ does not mean ‘living better than’ – in terms of other persons, or in the sense of continuous material accumulation, or as a project of improvement on the past (Thomson, 2010; Tortosa, 2009).

Albó boils *sumaq kausay* down to a deceptively simple process-project: “well-living together and supporting each other” (2009). Yet in practice this process-project necessitates *knowing how to live together and support each other*, which is no small thing in itself. It also entails communities understanding what the minimum conditions are for functional equality and how best to secure them – moreover, it relies on communities having the desire to achieve and maintain such an equilibrium. This, of course, immediately runs up against the currently hegemonic view of societies and economies, wherein humans are essentially acquisitive and inequality is the engine of innovation and growth. Accordingly, proponents of capitalism, particularly supporters of the more rapacious ‘unfettered’ variant, accuse those who advocate *sumaq kausay* of making

untenable appeals to a romanticized past, of being intellectually isolationist and anti-science, and of cultural demagoguery (Chuji, 2009; Espinoza, 2009). *Sumaq kausay* is a utopian vision, certainly; Salgado describes it as such because it anticipates new possibilities without predetermining their form, predicting “paradigms that do not exist yet, but are nevertheless viable” (2010, p. 199). Yet *sumaq kausay* absolutely embraces heterogeneity, as does everything Quechua – recalling that diversity has always been a defining physical and cultural characteristic of the Andes. As a result, this Indigenous iteration of ‘living well (but not better than)’ does not reject innovation or dismiss *a priori* the potential contributions of Western techno-scientific, or any other form of knowledge (Argumedo & Pimbert, 2010).

Evo Morales has described *suma qamaña* as “living within a community, a brotherhood, and particularly completing each other, without exploiters or exploited, without people being excluded or people who exclude, without people being segregated or people who segregate” (as quoted in Thomson, 2010). Similarly, Salgado writes that *sumaq kausay* “celebrates the community of the heterogeneous in a permanent symbiosis where there is no center or hegemony” (2010, p. 202). This perspective not only moves beyond what Davalos (2009) calls “the cost-benefit relationship as a social axiom,” it also moves beyond decrying or inverting that axiom. *Sumaq kausay* entails a recognition that the most promising alternative to over-consumption is not simply under-consumption or sufficiency, but generosity (cf. Patel, 2009) – an attitude that, for the Quechua, arises from the principles of solidarity and reciprocity (Argumedo & Pimbert, 2010; Misoczny, 2010). Further, in this case solidarity is cultivated within, between, *and beyond* human communities (Argumedo, 2010; Argumedo & Wong, 2010; Bizerra, 2009; Chuji, 2009; Salgado, 2010). *Sumaq kausay* thus destabilizes not only right-leaning ideologies, but also Marxist and liberal conceptualizations of ‘the good life’ – indeed, it breaks with any of the mainstream or alternative economic theories that posit nature as a productive factor or force external to human history, or relationships as purely utilitarian or properly strategic.

In *sumaq kausay* the objective, simply put, is to meet the needs and develop the potential of everyone in the community; it is a collective effort to share in a harmonious and vigorous life (Argumedo & Pimbert, 2010; Van Kessel, 2006). This is a deeply

socially embedded economic vision, wherein wealth is not measured in relation to accumulation, nor is poverty seen as a lack of material possessions (Gualinga, 2006). This is an economy in which different spheres are marked by non-hierarchy and non-exclusion, and a strong vivifying principle establishes that life is for the whole spectrum of the living, not for the abstracted and reified inanimate – or as Corragio (2009) notes, “[t]he necessary affirmation of Life as a condition for any other action makes this [...] the ultimate value of the economy.” Since this vision is a holistic one, and because the necessary material and spiritual conditions for a harmonious life will differ from place to place, the nourishment and expression of *sumaq kausay* is always particular, though a consistent set of principles undergirds these localized efforts (Misoczy, 2010; Salgado, 2010). *Sumaq kausay*, then, is an Andean blueprint for collective flourishing, a conceptual scaffold that makes it possible for Quechua to “live beautifully, with respect [...], with understanding, with determination [...] in accord with everyone, helping each other, supporting everyone” (Rengifo Vásquez, 1998, p. 113). This is a vision of solidarity and interdependence grounded in a thoroughly Andean morality.

Morality: *Rakinakuy*, *Yanantin* & *Ayninakuy*

Life in the Andes, in the sociological, ecological, and cosmological sense, is sustained by the expression of three key principles: *rakinakuy* (equilibrium), *yanantin* (duality), and *ayninakuy* (reciprocity). The Andes is an environment in constant flux, in which terrain, climate, flora, and fauna change dramatically as one moves through vertical and/or horizontal space. Here, diversity is an incredibly powerful generative force. The Quechua seek to bring order forth without imposing it, by understanding order as equilibrium rather than control, and viewing equilibrium as an outcome of maximum diversity creating and being created through ceaseless change (Argumedo, 2010; Argumedo & Wong, 2010). *Rakinakuy* describes proportion and balance in the human, natural, and sacred worlds – characteristics that must be nurtured, rather than being inherent (Gonzales, et al., 2010). *Rakinakuy*, as a result, is a key principle guiding action in a complex, chaotic, holistic, system. It promotes attentiveness to others and to one’s own place and role in creating harmony relative to (and in conjunction with) them. As

Vasquez describes it, “[h]armonizing means to follow the signs that other living beings show. Each living being is a sign for others” (1998, p. 100). The value of balance follows through to a second Quechua principle: *yanantin*, which describes how all things in the cosmos occur naturally in sets of complementary opposites, the archetype of which is the conjugal pair (Estremadoyro, 2001). Neither component of such a couple is superior or complete unto itself, nor is the other subservient or unnecessary, since each is integral to the rhythm and equity of the system as a whole. Distinctness, in Quechua teachings, need not (and does not) entail hierarchy (ANDES, 2011a). On this view, individualistic behaviour frustrates harmony and thereby endangers the fulfilment actually sought through selfish acts. The principle of *yanantin* is most evident in the balance of gender roles in traditional Andean communities, where labour,³⁶ inheritance,³⁷ leadership, and benefit-sharing break down along comparatively equitable lines, a parity that has led to assessments of Quechua society as exceptionally egalitarian (Bolin, 2006; Rasnake, 1986; S. L. Skar, 1979). Conceptually, *yanantin* also establishes the mutuality of rights and responsibilities (ANDES, 2011a).

In the Quechua view, a flow of generative energy connects everything in the material world, providing a kind of medium of communication. The ability of *Runakuna* to receive, return, and channel these flows beneficially, to partake in an exchange of creative influence, is the basis of *ayninakuy* (Allen, 1982). *Ayninakuy* is often characterized as the foundational value of Quechua society, its guiding ethos, and a natural principle that undergirds the entire Andean cosmos (Allen, 1981). According to Bolin, it is “the hallmark of Andean life” and “the catalyst for responsible and dignified living” (2006, pp. 150, 152). The term *Runa*, with which the Quechua refer to themselves, actually describes someone with whom a relationship of reciprocity can be established, making *ayninakuy* a central conceptual support of the very identity of Andean Indigenous Peoples (Stadel, 2001). The concept of reciprocity implies mutuality, and a kind of cooperative responsibility in particular; thus this principle gives rise to the

³⁶ Skar writes that in Quechua communities “the division of labour, where it exists, is complementary and not exclusive,” and notes that, “the pervasive attitude is that both man and woman must labour together as a unit in order for their work to be successful” (1979, pp. 449, 459).

³⁷ Inheritance follows behaviour and gender, so that daughters receive less land because they relocate to their husbands’ homes, while sons take on the responsibility of caring for their parents in their elder years (Swiderska, Argumedo, et al., 2006).

belief that everything received must be given back in equal measure, in a world where all beings – human and non-human – give and receive (ANDES, 2005; Mosley, 1992). ‘Giving,’ here, is not restricted to material, quantifiable, or formal exchanges, either, as there is a strong symbolic element in *ayninakuy*, clearly perceptible in the ceremonial offering of *kuka* or libations of *aqha* (fermented *sara* or *kinwa*) to spiritual beings. These offerings, along with other ceremonial activity, serve to define the complex relationships between and among material and immaterial communities (Allen, 1981; Argumedo, 2010; Argumedo & Wong, 2010). Neither is reciprocity engaged in as the terminus of a cost-benefit assessment, giving simply in order to receive, or as a duty performed within a system of rights or claims on future assets. It is “the pleasure of giving and nurturing with affection,” [...] not a ‘bartering of nurture’” (Rengifo Vásquez, 1998, p. 92).

Rakinakuy, *yanantin*, and *ayninakuy* do not collectively constitute a set of rules, but instead provide an epistemological basis for Quechua values; in turn, those values frame customary laws, spiritual practices, and socioeconomic organization (Argumedo, 2008). More so than rules, a common understanding of Andean concepts and a shared view that certain behaviours are constitutive of Quechua life guide individual action in the community (Rist, et al., 2003). Yet norms are not individually determined; they are not mere ‘habits,’ but instead are validated by consensus and mutual participation in the system they uphold (Ardito, 1997). Bourdieu elaborates:

the precepts of custom [...] have nothing in common with the transcendent rules of juridical code: everyone is able, not so much to cite and recite them from memory, as to reproduce them (fairly accurately) [and] it is because each agent has the means of acting as a judge of others and of himself that custom has a hold on him. (1977, p. 17)

Solving problems – in the natural, social, or immaterial world – thus consists of perceiving, reflecting on, interpreting, and internalizing *rakinakuy*, *yanantin*, and *ayninakuy* in daily activity (Rist, et al., 2003). This is, traditionally, how positive change is initiated and negative change managed. Although they do not constitute rules *per se*, and despite the fact even the most enduring Andean principles show a surprisingly low degree of formalization (Rist, et al., 2003), Swiderska (2006) describes *rakinakuy*, *yanantin*, and *ayninakuy* as having a ‘legal character’ because they give rise to action-

guiding norms that people feel a duty to respect. Further, damage to the social fabric caused by infringement of these norms is always addressed through sanctions or restitutions, pathways that reinforce cultural norms and produce specific collective ideas and goal-oriented behaviour (Ardito, 1997; Brandt, 1987; Reynolds, 2006; H. O. Skar, 1982). In the Andes, the system dedicated to this kind of social understanding and conflict resolution is, and always has been, Indigenous customary law.

Authority: Following 'Our Law'

Quechua and Aymara often refer to national legislation and the state's legal system as *la otra justicia*, 'the other law,' contrasting it with *nuestra derecho*, or 'our law' (Brandt, 1987). This is not meant to assert that there is a monolithic, pan-Andean Indigenous customary law, though (Ambia, 1989; Drzewieniecki, 1995). To be universal and singular, such a law would need to undergo abstraction and formalization, to be distilled from lifeways and calcified as precedent, codified, and imposed. Further, sacrificing discursivity produces practices that are necessarily coercive (Rengifo Vásquez, 1998), in which obedience supplants deliberation. Such a result would fail to serve Indigenous communities in the Andes, if for no other reason because law would then run counter to the value diversity holds in Quechua culture; to the Andean view of equilibrium as arising from never-ending flux; and to the core of a normativity based on reciprocal and non-hierarchical relationships. Instead of one Andean customary law, what is found is a range of local articulations of Andean principles and norms, which conform to shifts in individual circumstances, factors, and needs while remaining consistent with Quechua morality and ontology (ANDES, 2005; Swiderska, Argumendo, Vedavathy, & Nellithanam, 2006; Tobin & Taylor, 2009). It is therefore possible to speak of 'Andean Indigenous customary law' generally only through acknowledging these particularities of form and substance. Because Quechua customary laws are aspirational, they must be capable of responding to changes in local goals; because they address practical necessities, they must be capable of adapting to fluctuations in community needs, giving rise to new derivatives to meet new challenges, or giving way when problems are solved or better methods developed (Ardito, 1997; Swiderska, 2006).

Relevance is a key axis of legal validity – in terms of both the authority and the effectiveness of laws.



Community women attending an assembly in Chawaytire

Quechua customary law governs all aspects of life, from family disputes to economic exchanges to access to agricultural supports (Ambia, 1989; Drzewieniecki, 1995). Because of the nested structure of Quechua society, which construes ‘membership’ as occurring within wider and wider circles of affiliation, issues of justice involve deliberation at different levels. Kin groups deal with disputes that do not have a direct impact on the community as a whole, while the *varayoc* (Elders) exercise authority in higher-level, more impactful or intractable conflicts (Swiderska, Argumedo, et al., 2006). *Varayoc* are called upon according to their relevant expertise and/or because the issue at hand is considered part of their individual ‘spheres of concern’ (Doughty, 1971). Brandt (1987) describes the role of local authorities in processes of justice as more

mediation than judgment, since consensus and compromise are key methodologies, while members of the wider community are encouraged to offer interpretations and raise potential alternatives. As with Quechua governance more generally, this approach strives for “maximum participation with a minimum concentration of power” (Smith, 1982, p. 29).

There are clear tensions between mainstream and Quechua understandings of law, as well as conflicts between the ontologies underlying these disparate systems. Customary law certainly deviates from the exercise of civil or human rights, enacted as individual claims against leaders or systems of authority. Drzewieniecki, for example, asserts that the very vocabulary of rights is alien to Andean customary law, which is guided not by unilateral claims but reciprocal obligations (1995, at note 9). In Quechua systems, conflict-resolution is the domain of parties who trust each other, rather than of impartial (and often anonymous) officials. Similarly, context and character are considered highly relevant in the exercise of customary law, and are discussed as part of the process of fully understanding and effectively resolving the dispute, rather than being painted as inherently bias-inducing or privacy-violating. Determining fault, naming a ‘winner,’ and meting out punishment are neither proximate nor ultimate goals (Ardito, 1997). Instead, re-establishment of harmony;³⁸ amelioration of disruptive forces or elements; prevention of future conflict, reinforcement of interdependency and the moral substance of the community as a whole; restorative compensation; and the rehabilitation of offenders are priorities, and the community can draw upon a wide range of culturally embedded sanction³⁹ and incentive strategies in pursuit of these goals (Ardito, 1997; Brandt, 1987; Reynolds, 2006). Even the harshest impossible punishment – ostracism – speaks to the centrality of community in Quechua conceptualizations of justice. That community, for the Quechua, takes the form of the Andean *ayllu*.

³⁸ In cases of conflict with outsiders, though, equilibrium is not considered a criterion (Brandt, 1987).

³⁹ Note that sanction is always remedial in orientation (Brandt, 1987).

Society: The Andean *Ayllu*

A nearly ubiquitous Andean historical formation, the *ayllu* (loosely: community) is “the ‘seed’ from which civilization and political structures such as Tawantinsuyu were germinated” (Choque & Mamani, 2001, p. 207). The Inka themselves began their climb to dominance as just one *ayllu* among many (Means, 1920). In the colonial and republican periods, land grabbing and marginalization of the Quechua resulted in the displacement of the *ayllu* as a political and economic system, while subsequent nation-building actively suppressed it in favour of tiered iterations of ‘citizenship’ and corresponding affiliation with the state (A. Escobar, 2008). What colonialism did manage to eradicate were the coordinated discontinuities that had been the hallmarks of dispersed settlement along the whole swath of the highlands, imposing borders and spurring the concatenation of diverse communities into countable, taxable, manageable, and indoctrinable entities (Fernandez, 1998b; Rasnake, 1986; Remy, 1994; Weismantel, 2006). At the other end of the political spectrum, unions, non-governmental organizations, nationalist revolutionaries, and left-wing reformers have also sought to disrupt the logic of Andean Indigenous spatial and social organization (A. Escobar, 2008; Rivera Cusicanqui, 1990). The opposition of underlying ideologies was largely immaterial to the intentions manifested, which in both cases involved the reconfiguration of the Indigenous traditional order. Enough fracture and manipulation was successfully wrought that, for centuries now, “[t]he Andean world has lived in the colonial artefact of the indigenous community” (Fernandez, 1998a, p. 136).

Yet the *ayllu* has persisted. Allen notes that, for the Quechua, “the *ayllu* itself is thought of [...] as an [omnipresent and] eternal entity, drawing the speaker into both past and future [...] beginning on an immediate local level and expanding through time and space to include [...] all Runa,” living and ancestral (1981, pp. 164, 167). Instead of succumbing to alien influences, it has served as an Indigenous filter, altering and incorporating the most suitable of the Settlers’ resources and practices, while these modifications have actually served to reinforce its own central features (Argumedo, 2010; Argumedo & Wong, 2010; Rengifo Vásquez, 1998). This kind of adaptability has enabled the perpetuation of the *ayllu*, ontologically intact, down through successive

generations. Macas (2000), in fact, describes its primary function as “ensur[ing] continuity of indigenous peoples’ historical and ideological reproduction,” while Rasnake (1986) points to the practical goal of retention of maximum collective autonomy in the face of exploitation and imposition, made possible by careful attention to any legal lacunae and political flexibility afforded by successive colonial regimes. An excellent example of this strategic adaptability and cultural filtering can be found in the historical response to the imposition of colonial political structures at the community level. Originally, Quechua *karguyoc* (holders of *kargu*) were charged with organizing specific ritual events, such as feasts, but demands that communities put forward European-style leaders were met by the creation of an ostensibly new authority out of this pre-existing ‘office.’ In *ayllu*, a *kargu* (sphere of responsibility) passes from member to member, both male and female, so anyone can, and everyone should be prepared to take up such a duty (S. L. Skar, 1979). Given the regular rotation of tasks and networks of aid available to *karguyoc*, a *kargu* is properly a collective, rather than individual burden; and though the nature of the activities performed as a *kargu* expanded in the colonial and republican eras, the office itself cannot be equated with that of ‘mayor,’ for example. Alongside this ostensive re-channelling of recognized authority, the normal modes of consensus decision-making through *kawiltu* (deliberation in councils), along with the performance of *thaki* (community service), continued in Andean communities (Albro, 2005; Drzewieniecki, 1995; Rivera Cusicanqui, 1990). *Ayllu* members thus both perceived and acted on the difference between ‘leadership’ and ‘representation,’ between abstract and tangible authority, by consciously re-embedding what Skar refers to as their traditional model of ‘acephalous organization’ (Albro, 2005; Rengifo Vásquez, 1998; S. L. Skar, 1979). In such cases, the *ayllu* managed to disrupt, if not actually reverse the flow of assimilation.

Today the *ayllu* is described as a complex nested or ‘segmentary’ body, in Sahlins’ (1968) terms, a structure in which individual households make up the basic economic and social units of a larger whole, so that membership at any level entails inclusion at the highest (Alarcón, 2001; Argumedo & Wong, 2010; Mosley, 1992; Spalding, 1973). In the Quechua *ayllu* land is communally held (officially belonging by the community as a whole), and managed as a common property resource that cannot be

alienated or sold, though usufructory rights are inherited and individual families cultivate specific plots (Godoy, 1986; Rist, et al., 2003; Weismantel, 2006). The provision of mutual aid, along with the defence of each household's claim on agricultural necessities (regardless of the ability to 'pay' for them), implies that redistribution-within-relative-equality⁴⁰ is a necessary condition for the *ayllu* to function (Godoy, 1986; S. L. Skar, 1979). Such functioning proceeds through a robust kinship system, segmented community structure, reciprocal work relationships, shared behavioural norms, rotating leadership functions, and embedded ceremonial practice; mutual defence and aid, both physical and economic; and common stewardship of the ecosystem (Argumedo, 2010; Godoy, 1985, 1986; H. O. Skar, 1982). This is a fundamentally territorial identity, and is additionally explicit and particular in that orientation, but its limits extend beyond the material political – indeed, beyond even the physical and visible (Andolina, 2001; Gonzales, et al., 2010). It is an identity defined by ties to kin, where a sense of kinship includes more than merely the specifics of blood and birth.



Women sorting papa for market (photo credit: ANDES, 2011c)

⁴⁰ This does not imply that Quechua households command, or need to command, identical sets of resources.

Relationality: Concentric Circles of Kinship

The Andean solidarity achieved within and beyond blood ties is, according to Allen (1981), remarkable for its ability to work through (or even ameliorate) the stresses of communal existence, from petty resentment to fractious infighting, so that the *ayllu* is “an intimate and thoroughly integrated group” (S. L. Skar, 1979, p. 455). Kinship – real or fictive, including ties through blood, marriage, reciprocity, ritual, and *compadrazgo* (godparenting⁴¹) – organizes labour, management of common property, access to agricultural lands and supports, and answerable calls for aid (Albro, 2005; Drzewieniecki, 1995; Means, 1920; Mosley, 1992). Kin provide the extra hands needed to undertake large projects and take up any slack when a household finds itself in need; and it is kin that validates and even answers the claim a new household has on its own share of land and the labour necessary to work it, as well as forming the network into which that new household’s labour will fall (Spalding, 1973).

Fictive kinship as a medium of organization creates *ayllu masi*, neighbours (literally ‘*ayllu* mates’), people bound to one another through participating as equals in the life of a shared place (Allen, 1981). As Vasquez describes:

In the Andes we all live as relatives. A relative is someone close to us with whom we live in harmony and whom we protect and who protects us; someone with whom a life-giving conversation flows that brings about health and makes life fruitful. The *ayllu* is not only a consanguineous relation, rather it is a community of people tied by affection, from whom grows an affectionate and healthy living solidarity. (1998, p. 92)

This solidarity, this consanguinity is ecosystemic, or as one group of Andean academics express it: “[i]n our world everything is alive; nothing is excluded. We all are relatives.” (Gonzales, et al., 2010, pp. 189-190). Thus one can hear, for example, the hail referred to as ‘godfather,’ the *papa* as ‘daughter’ (with the newest additions to the *chakra* being, fittingly, ‘daughters-in-law’), *apu* as ‘grandfathers,’ and the spring water as ‘son-in-law’ (Rengifo Vásquez, 1998). Recognition of this fact reverberates through Quechua built

⁴¹ Note that this term occasionally appears when referencing fictive kin in general, and not just the godchild-godparent relationship.

environments – even local roads wind instead of cutting through the landscape.⁴² The Quechua members of a community thus share in a wider *ayllu* of human and non-human beings, all of whom exhibit personhood (Fernandez, 1998b; Rengifo Vásquez, 1998; Rivera, 1998). Though not in the same way or to the same extent, every material thing, the biotic and abiotic alike, possesses vitality and engages in social interactions, as do spirits and ancestors (Allen, 1982). Several authors refer to this realm as “a world of equivalents” (Gonzales, et al., 2010, pp. 189-190; Rengifo Vásquez, 1998, p. 91).

In the Andes, ‘culture’ is more than a phenomenon associated with mankind; it belongs also to nature. Many authors who tackle this idea underscore the Latin root of the term – ‘to nurture’ – and note its presence in the word ‘agriculture.’⁴³ There are, therefore, not one but three principal Andean *ayllu*-realms: an *ayllu* of *sallqa* (what would more commonly be referred to as ‘nature’ or the ‘wild’); an *ayllu* of *runas* (the domesticated world, including humans and the flora and fauna with which they are most closely associated); and the *ayllu* of *wak’a* (spirits). Further, a single region – even a highly geographically constrained one – will contain multiple, overlapping, interdependent *ayllu* (as well as potential *ayllu*), since the Quechua perspective references co-equal communities beyond the human (Allen, 1981). All members of the *pacha*, from every *ayllu*, are considered kin. Members of the three *ayllu* converse – literally – with one another:

‘Conversation’ is not a metaphor. Conversation denotes that the beings that communicate with one another do so in this way because they are able to understand one another. The term ‘conversation’ includes every form of expression, whether it be feelings, emotions, or other diverse manifestations – and it is not necessarily conveyed in speech, as occurs with dialogue. (Gonzales, et al., 2010, p. 190)

When the three *ayllu* are in balance, when the *Runakuna* have understood, sought out, and nurtured the material and spiritual conditions necessary for harmony, the Quechua speak of *sumaq kausay* as something palpable, as a condition that can be known

⁴² It is worth mentioning that contemporary infrastructure projects, which blast away at the steep slopes of the Andes, increase erosion exponentially and trigger regular – and deadly – landslides.

⁴³ Some go as far as to hyphenate the word in order to emphasize the point, rendering it as ‘agri-culture.’ This is more common in food politics, especially food sovereignty literature. See, for example, Jules Pretty’s *Agri-Culture: Reconnecting People, Land, and Nature*.

firsthand. The *pacha*, then, may be seen as a home containing all of the kin, bringing them together: *Runa*, *wak'a*, and *sallqa* (Rengifo Vásquez, 1998).

Strategic Framework

The structuring of the *Parque de la Papa* reflects a conscious attempt to revitalize and repatriate the cultural landscape of the Andean *ayllu*; to bring forward the elements of Quechua morality, backed by customary law, and root them in contemporary practices and processes; and to assert ‘living well,’ as a condition shared by all manner of kin, as the ultimate end to which these communal efforts incline. In other words: the conceptual framework of the *Parque* is realized in its strategic framework. In this the ‘synthetic principle’ of Andean thought is clearly discernable, as ideas of the future/back (*qhepa*) and past/ahead (*ñawpaq*) guide an effort that connects ancestors and descendants – the *ñawpaq Runakuna* – in a formation that both would recognize as Quechua. The communities of Sacaca, Chawaytire, Pampallacta, Paru Paru, Amaru, and Cuyo Grande are attempting to build institutions and processes that strengthen culture *and the resiliency of culture*, a consciously nurtured trait that underwrote the persistence of the *ayllu* through the Colonial, Republican, and Peruvian chapters in the story of the Quechua. Change-within-continuity – consistency with the greater body of Andean thought, alongside adaptation to the exigencies of life in contemporary Perú – is thus a characteristic of all of the strategies outlined below. These strategies gather under the rubrics of community governance, agricultural activity, economic organization, internal and external communication, international collaboration, legal hybridization, and wider participation (in the form of alliances and exchanges). The approach, overall, simultaneously reclaims history, embedding it as living memory, while constructing alternative reference points from those offered by an explicitly cosmopolitan or technocentric modernity.

Innovation in Governance

The confederation of the original six constituent communities into a single structure – a community made up of communities, *ayllu* within *ayllu* – without this entailing a loss of autonomy or particular affiliation, has catalyzed a consolidation of and confidence in Quechua practices, knowledges, and identities (Muller, 2006); while collectively overcoming certain key challenges and winning several important strategic victories has amplified this effect. Over the past several years, this catalysis has reverberated through the different generations and genders living in the valley, with women and youth playing a strong (and increasingly prominent) role in the reconstitution effort (Argumedo & Wong, 2010). The first few collaborative projects undertaken provided a proving ground for the nascent *Parque*, as well as opening up a space in which to forge new inter- and intra-community relationships. The thrust, overall, has been the collective forging of tools of conviviality, adapted to the current, lived context, that embody traditional Quechua beliefs and values. Distilling the intent and effect, Argumedo writes that, “[t]he story of the Potato Park is about how the interests of these communities are worked out within a new organizational framework that demands cooperation and constant renegotiation. The communities have come to understand that only through cooperation will they be able to defend their rights in the face of imminent change brought on by the Peruvian state and the global marketplace” (2008, p. 54).

Governance Systems

While the communities had previously struggled in isolation to secure land tenure, confederation under a state-legible identity (ostensibly a simple conservation project) allowed the *Parque de la Papa* to register legal title over collective lands (CIP, 2008b; Swiderska, Argumedo, et al., 2006). ANDES used Articles 3, 4, 5, 7, and 8 of ILO-169, coupled with Article 149 of the Peruvian Constitution, to establish that the *Parque de la Papa* would be managed under the customary law and traditional practices of its constituent Quechua communities (Argumedo, 2008). The registration of a collective land title necessitated the creation of a singular representative organization operating at the supra-community level: the Association of the Communities of the Potato Park (the

Association), founded in 2001 (Swiderska, Argumedo, et al., 2006). Authority is shared between the villages and specifically vested in the Association, which is charged with coordinating the work of the collectivity (Argumedo & Wong, 2010; Colchester, 2003; Koerner, 2005). Membership of this body comprises the traditional head authority of each of the *Parque*'s communities, along with, *inter alia*, representatives of local residents, NGOs, and cooperatives, and other traditional authorities (Argumedo & Pimbert, 2005; Stolton, et al., 2006). It is this Association which is officially recognized by the state, having entered the national Public Registry in 2002 in order to establish collective ownership of the *Parque*'s Interpretation Centre, a building physically located in the community of Sacaca (Argumedo, 2008). In envisioning this governance structure, inspiration was drawn from Indigenous community initiatives in neighbouring Bolivia and nearby Costa Rica, which members of the communities visited prior to founding the *Parque* (Argumedo & Pimbert, 2005). The model was also the product of wide-ranging dialogue within and between the communities of Sacaca, Chawaytire, Pampallacta, Paru Paru, Amaru, and Cuyo Grande.

The collective governance system is ultimately derived from customary Andean principles and complements parallel, often coincident traditional systems. Rotation of opportunity and responsibility – seen in the traditional office of *karguyoc* – carries through to involvement in some of the *Parque*'s programmes, with participants selected by their own communities based on mutually agreed-upon criteria (Argumedo & Stenner, 2008). Alongside the more traditional governance bodies, the demands of the Peruvian system (imposed by law in the 1960s) also necessitate the annual election, by each community, of an individual who will represent them in national-level processes. These officials liaise with state bodies and provide a voice in government-led initiatives (Tobin & Taylor, 2009). The *Parque*'s governance structures proper are still under the jurisdiction of the traditional authorities in the six communities, and hold authority over all decision-making in issues of land distribution, resource allocation, and internal conflict resolution (Tobin & Taylor, 2009). External input is sometimes sought from trusted individuals or organizations, and the same bodies that provide such guidance may also be solicited for training and capacity-building. (This is where ANDES is most visible in matters that would otherwise appear to be internal to the communities

themselves or the *Parque de la Papa* as a collective.) Decisions that are not made collectively are the prerogative of the *varayoc*, individuals who inspire considerable reverence, based on their skill and accumulated knowledge, and whose judgment merits great trust (Argumedo, 2009). The combination of Elder-rendered and deliberative decision-making, which balances participation of the wider group with appeals to the wisdom and ability of traditional authorities, is one way the Andean principle of *rakinakuy* takes shape in the *Parque*. This ‘balance’ is neither static nor rigidly procedurally democratic, though; not all knowledge is considered equally valid or felt to be equally relevant to a given decision. While Quechua values prioritize as widespread an involvement as possible in decision-making processes, they also point to the importance of flexibility and the dynamism of harmony.

This model of governance has proven itself in the decade-plus since the *Parque*’s founding. There has been no resurgence of the land and resource disputes that previously rocked the communities, and which in the past had erupted into open violence (Argumedo & Stenner, 2008; Tobin & Taylor, 2009). In this case, decisions about benefit-sharing combined with the resurrection of ceremony – specifically, a customary festival that includes walking the villages’ shared and outlying boundaries – to reinforce not merely the territory-related ‘verdicts’ coming out of dispute resolution mechanisms, but also the ties within and between the groups and the land (Argumedo, 2008; Colchester, 2003). As a process, conflict management moves upward through the nested structures that characterize the traditional *ayllu* configuration: beginning with discussion at the family level; moving to appropriate *varayoc*; and terminating at the level of the General Assembly of the communities. This movement is very much in keeping with the traditional Andean model of justice, where decisions have weight because they are dialogic and compromise-driven, largely voluntary, resonate with custom, and reinforce communal integrity. This does not mean that Quechua have no ego or ambition, merely that participation in *ayllu* relationships encourages each person to reconcile individual interest and interdependency in favour of maintaining the *rakinakuy* of the community as a whole.

Knowledge Systems

Quechua customary law includes an obligation, incumbent upon every community member, to learn and pass along traditional knowledge – indeed, the knowledge commanded by the villages is a kind of collective wisdom, iterated both by individuals and the *Parque de la Papa* as a whole. Certain kinds of knowledge are the domain of traditional healers or *varayoc*, in which case customary law describes a responsibility for community members to respect and protect its secrecy. Penalties attach to the failure to honour these prohibitions, while related prescriptions call for its transmission to appropriate family or clan members (and/or initiates) (Swiderska, Argumedo, et al., 2006). Third-party access to traditional knowledge has entered customary law through adaptation to emergent circumstances, and in most cases is covered by the proscription of alienation, privatisation, or capitalization on that knowledge (Swiderska, Argumedo, et al., 2006). Measures to protect TK, which tend to draw the interest of, and occasionally the actual support of outside organizations (principally, those interested in cataloguing it, either for posterity or for appropriation), typically overlook the imperative of maintaining knowledge systems as living, embedded formations. National and international activity, for example via the tenets of treaties like the CBD, focuses attention on loss of traditional knowledge through theft (biopiracy), caring comparatively little (if at all) about its loss by other means.

An elected position in the *Parque de la Papa* sees certain holders of TK designated as *technicos*, or ‘barefoot technicians,’ identified and given their mandate by their home communities. In their most important role, *technicos* reach out to neighbouring villages inside the *Parque*, in order to create and manage networks for the collective maintenance, transmission, organization, application, and generation of local practical wisdom (Stolton, et al., 2006). New knowledge is created through the process of learning-by-doing, producing innovations by actively testing and refining traditional Indigenous agro-ecological knowledge and discussing the results; while pre-existing knowledge and experience is transmitted across community borders (ANDES & IIED, 2005). *Technicos* also organize training courses, encourage widespread participation in local meetings, participate in agro-ecology initiatives, perform advocacy work, and act as liaisons between the villages in the *Parque* and outside experts (Argumedo, 2008;

Sarmiento, Rodríguez, & Argumedo, 2005). They play a key role, for example, in the relationship between ANDES and the communities – a relationship the NGO describes as one “between formal and informal Quechua technicians” (Argumedo & Stenner, 2008, p. 7). They are additionally charged with arranging and participating in exchanges between the *Parque* and other Indigenous communities, both within and outside of Perú (Argumedo & Pimbert, 2005; Sarmiento, et al., 2005). Because of this function as intermediaries and emissaries, *tecnicos* need to be more than knowledge holders – they need to be proficient ‘translators’ of that knowledge, as well as of relevant language, culture, and context. Participation in collaborative research, along with the need to meet funders’ reporting requirements, means that specific kinds of knowledge, in certain formats, must also be produced by the *Parque*. In these cases ANDES identifies issues for discussion, which the *tecnicos* then translate into community-relatable questions, often using tape-recorded stories (ANDES, 2005). The communities favour Quechua methods for the structuring, transmission, generation, and recording of knowledge, and thus usually employ storytelling, ceremony, forecasting and backcasting techniques, memory and mnemonics, and other fundamentally oral and visual methodologies (Argumedo & Pimbert, 2005; Gonzales, et al., 2010). These are conscious choices that do not, despite extensive stereotyping of the rural in general and Indigenous Peoples in particular, reflect helplessness, illiteracy, or a lack of access to more mainstream options.

Study collectives, made up of a minimum of three local families, are organized to analyse, discuss, and propose solutions to community and cross-community issues. Known as ‘Local Learning Groups’ or ‘Thematic Study Groups,’ they meet regularly, facilitated by the *tecnicos*, and often interface with one another to generate dialogue on shared concerns (Argumedo & Wong, 2010). The first such group predates and actually helped precipitate the *Parque de la Papa* itself: a collective of recognized cultural knowledge holders, formed in 2000 to discuss governance issues (Dias & da Costa, 2008). Out of respect for the agricultural routine and the communities’ social norms (in which evenings are devoted to conversation with friends and neighbours), Local Learning Groups meet after dinner, approximately once a week (ANDES, 2005; Dias & da Costa, 2008). Outside actors occasionally attend these gatherings as observers, or review videos of the meetings themselves (ANDES, 2005). Different groups (including economic

collectives) will sometimes gather to exchange ideas, when circumstances call for widening the pool of input, while all of the groups have been known to come together as one. Through such meetings, the capacity of communities' traditional knowledge institutions is increased, as is the discursive nature of their problem-solving processes, and overall, the adaptability and resiliency of the *Parque* is enhanced. In other words: learning and innovation are actually built into the system of nurturing agro-ecology, pursuing alimentary security, and working toward food systems sovereignty. Further, these socio-cultural networks manifest the Andean principle of *ayninakuy*, as knowledge flows back and forth between groups who share a commitment to one another and to the land; while the lateral movement of expertise redistributes power horizontally, promoting *rakinakuy*. When engaged in knowledge transmission, the apprentice/master relationship entailed in learning/teaching additionally brings in the third pillar of Andean morality: *yanantin*. The nested structure of these 'platforms,' with farmer-to-farmer and family-to-family exchanges occurring within and alongside community-to-community exchanges, is itself reflective of the *ayllu* social formation traditional to the Andes. Pimbert refers to this kind of project-based reinvigoration of customary institutions and principles as "building the 'soft side' of the land" (2006, p. 11).

Intergenerational transmission of TK using customary conduits entails more than discussion, though. Indigenous knowledge is experiential and practical, as well as discursive and inspirational, meaning that learning entails 'seeing' and 'doing,' not merely 'being told' (Tobin & Taylor, 2009). Ricardo Paccu Chipa, who was a teenager when the *Parque* began to coalesce, describes discovering pride in his Quechua identity through his direct involvement in the communities' recovery of Indigenous knowledge and associated practices: "[w]e youth have been a challenge here [...]. Back then, tradition didn't mean much to me; if anything, I was a bit ashamed of it. Now, [...] I travel abroad in traditional dress, and I feel truly proud of where I'm from. (as quoted in Murphy & Townsend, 2010). This is a significant step, since the lack of youth interest and participation in knowledge transmission systems has been identified as a major factor contributing to not only the loss of TK, but also, more broadly, cultural discontinuity and the erosion of local biodiversity (Scurrah, Anderson, & Winge, 2008). Similarly, in the *Parque de la Papa* children are invariably included in agricultural and household activity,

having chores to perform, participating in the collection of medicines and other materials from the forested and ‘wild’ areas, and taking part in *raymi* (Swiderska, Argumedo, et al., 2006).



Participatory mapping exercise in Sacaca (photo credit: ANDES, 2011c)

As necessary as is the active participation of the next generation, autonomous communal access to, and ongoing interaction with the land is equally vital to the generation and perpetuation of Quechua traditional knowledge. Knowledge of subsistence agro-pastoralism and agro-forestry is obviously rooted in the physical landscape, while sacred and specialized (for example, healing) knowledge is dependent on ceremonies and practices undertaken in specific, culturally significant, often sacred locations: in forests, on mountain peaks, alongside rivers or lakes, and in the presence of ancestors whose physical bodies have merged with the surrounding earth (Argumedo & Pimbert, 2005; Swiderska, Argumedo, et al., 2006). In such cases it is not ‘land’ but ‘traditional territory’ that matters, bifurcating the claims of Indigenous agrocentric communities and the *campesino* organizations with which they are typically grouped (Grey & Patel, forthcoming). For the Quechua, TK is said to emanate from *wak’as*, from *apu* and *Pachamama*, collected through ritual activity, and of these spirits the

communities of the *Parque* declare, “we follow their teachings” (ANDES, 2005, p. 5). Because this knowledge is practical as well as inspirational, living on and through the land is pedagogy in itself. This lends new status to biota and abiota classes otherwise viewed as ‘resources,’ ‘crops,’ or ‘wilderness,’ locating them within traditional knowledge systems – systems that have both biological/physical and cultural dimensions that merit (if not demand) nurturing and safeguarding (Swiderska, Argumedo, et al., 2006). This is why, for example, *pakarina* (sacred groves), along with the cultural practices with which they are associated, are a key component of Quechua ecological conservation efforts (Mitchell, 2003). Medical knowledge in the *Parque* is derived, in part, from ritual activity in the valley’s sacred forests, and *janpeq* (herbal healers) and *paqo* assert that their relationship with cultivated medicinal plants differs from that with wild varieties, which have different chemical and spiritual properties. Similarly, ceremonies performed at the forest’s edge or on land that has been ecologically damaged do not yield the same exchanges and understandings (ANDES, 2005). Ultimately, even the concepts that describe apparently purely practical or factual matters – ‘conservation’ and ‘development,’ for example – are also (and always) ontological and epistemological, cosmological and contextual.

Land & Labour Management Systems

As with knowledge, land in the *Parque de la Papa* is held collectively, either by a family or by the community as a whole. Accordingly, as the Executive Director of ANDES notes, “the landscapes that result from how it is worked, the biogenetic diversity and ecosystem goods and services that it yields, the cultural and spiritual values that determine its relationship with humans, and the knowledge, practices and innovation systems that determine what and how they are cultivated are also all held collectively” (Argumedo, 2009, p. 2). Cultivation on commonly held land is communal, what the literature refers to as ‘common field agriculture.’ This management strategy sees land use coordinated by an assembly of *chakra Runa*, who collectively decide the best use of particular areas, both those containing crops or ready to be planted and those in fallow or ready for rest. Parcels of land within common zones (for example forests, wetlands,

grasslands, and communal *chakra*) are used by everyone, under careful watch of the collective, for various purposes, including grazing animals, gathering wood, harvesting medicinal and wild plants, and collecting organic fertilizer (Argumedo, 2010; Argumedo & Wong, 2010). Benefits arising from working and nurturing the land are guaranteed to every household, under the condition, governed by customary law, that use is equitable, sustainable, and respectful (Argumedo, 2009). Access to and management of other common supports also falls under the rubric of collective custodianship, and this use and benefit structure extends to all of the myriad elements of the biological and cultural heritage shared by the communities. The resulting culturally-mediated 'open access' flow of material and immaterial goods travels back and forth along kinship lines and customary social networks, reinforcing solidarity and equity, while blurring the mainstream differentiation of 'resource users' and 'resource providers' in a system of usufruct and collectivity (Guillet, et al., 1983).

Andean agriculture, its methods shaped by an exceptionally demanding climate and highly diverse geography, lends itself to generalization in and pooling of labour. Production must be optimized across distant fields at various altitudes, in which different crops are planted at different times (Guillet, et al., 1983). In areas like the *Parque*, which covers considerable vertical and horizontal terrain, variations in climate, slope, and soil composition produce what amounts to a different agricultural calendar for each zone of vegetation. To add to this, the traditional Andean technique of field scattering means that, in many cases, a single family cultivates *chakra* that are spread out across a considerable distance. Labour intensity is thus very high to begin with, and is intensified further by the fact that preparing fields, planting, fertilizing, weeding, and harvesting are carried out largely (if not exclusively) by hand. Communal and shared effort, organized cooperatively, allows households to overcome scheduling problems and labour shortfalls (Guillet, et al., 1983). Further, careful coordination of planting and harvesting schedules helps to ameliorate pests and crop diseases, while concatenating fallow areas so that livestock can be more efficiently grazed in and around the community (Goland, 1993; Guillet, et al., 1983). Labour is not rigidly divided along gender lines, except in certain ritual aspects, and both men and women are considered essential in supporting the land's fertility (women being closely associated with the seed itself) (Guillet, et al., 1983; S. L.

Skar, 1979). Children join in, too, with little boys as young as five or six, intensely curious about the work going on, helping to turn the soil (Rivera, 2008).



Tending papa, using traditional tools and collective labour
(photo credit: ANDES, 2011c)

Thus labour – what Mosley calls “the most precious of Andean essentials” (1992, p. 49) – is also managed according to custom, waxing and waning with the agrarian calendar (Argumedo & Wong, 2010). In fact, one of the most immediately discernable manifestations of the Quechua principle of reciprocity can be found in the practices of *mink’a* (communal effort) and *ayni* (mutual aid), the “institutionalized forms of a give-and-take which permeate Andean social existence” (Allen, 1981, p. 166).⁴⁴ The line of demarcation between these two is not always clear⁴⁵ (or not always important to those engaged in these labour arrangements, as the case may be), and at least one author refers to both with the portmanteau, ‘*ayni-minka*’ (Rockefeller, 2010). In the case of *mink’a*, group labour is rewarded with the other key Andean goods – food and drink,⁴⁶ often

⁴⁴ Note that a third form of group-oriented labour exists: *yanapay* or *yanapakuy*, voluntary aid without the expectation of the receiver reciprocating.

⁴⁵ Allen (1981) distinguishes between the two by referring to *mink’a* as hierarchical or asymmetrical exchange, in which labour is repaid with food or other necessities.

⁴⁶ Sometimes seed will be exchanged for labour.

accompanied by music and dance to encourage joyful interaction – with the ‘give’ and ‘take’ happening simultaneously (Froemming, 1999; Rivera, 1998). In the case of *ayni*, individual labour is typically reciprocated with individual labour, in a perfectly equal trade staggered in time. Effort is the medium of exchange in both,⁴⁷ a good that transcends money, with the foundational principle being that what is given must be recognized through return in kind or measure (or both) (Mosley, 1992; Salgado, 2010).



Intercropped kiwicha & sara in the Parque de la Papa
(photo credit: Tran-Thanh, 2008)

In the *Parque de la Papa*, this back-and-forth is described in terms of both motivation and effect: “[g]ood intentions,” they say, “are met with good intentions” (Tobin & Taylor, 2009, p. 46). A focus on motives is important, since in *ayni* neither the schedule nor the form of repayment need be set in advance; it is not an exchange

⁴⁷ In the case of *mink’a*, the food and drink being exchanged are seen as functions of their labour-value.

reflective of the ‘payment-repayment’ dynamic of contractual relationships. Indeed, the requirement of repayment is ameliorated or even suspended in the case of those who simply cannot reciprocate,⁴⁸ making redistribution inherent to the system (Swiderska, Argumedo, et al., 2006). Autonomy and obligation here interweave, with no necessary conflict between the two; in fact, obligation at the micro level serves the autonomy of the wider group, reinforcing a parallel social norm that encourages individuals to be both self-sufficient and to support their community (Swiderska, Argumedo, et al., 2006). This bifurcated obligation manifests even at the level of the household – the smallest unit of labour – where children have a responsibility to work diligently, demonstrate respect, and support the integrity of the home (Swiderska, Argumedo, et al., 2006). Nunez del Prado underscores this subsistence-within-reliance dynamic, writing that, “[t]he *ayni* is a subtle thread in the fabric of life, coloring the most basic human activities [...] It is said ‘Life is an *ayni*’ meaning all activities are interwoven through this medium” (1973, p. 30). Alongside reciprocity, *rakinakuy* and *yanantin* can be found in the gender and age inclusiveness of cooperative labour, in which, “[e]veryone knows what is required, and the work proceeds without any particular direction by anyone” (S. L. Skar, 1979, p. 454). These ancestral forms of labour management, with a strong normative orientation complementing their practicality, are a consciously maintained element of everyday life in the *Parque de la Papa*.

Adaptation of Agriculture

The *Parque de la Papa* lies across two Andean altitudinal/ecological zones: the *quechua* (2,300 - 3,500 masl) and the *puna* (3,500 - 4,800 masl). Land use here is scattered and diversified, with non-contiguous *chakra* creating a visual mosaic along the valley floor and extending up the steep slopes of the surrounding mountains, right to their summits. The highest of these are *chakra* of native *papa*, acclimated to the fringes of habitable regions, in which crops are rotated every three to nine years. Lower down, but

⁴⁸ An example here, common in the literature, is the care Andean societies have traditionally taken in providing for widows in the community (Froemming, 1999).

climbing higher as climate change warms the valley, legumes and grains⁴⁹ populate the cultivated land, creating a riot of colour across the landscape. At any time the majority of the land in the *Parque* – more than a third – is resting, creating the appearance of inefficiency or even abandonment to the untrained eye, particularly when viewed alongside the mere 13% of the land under permanent agriculture (Argumedo, 2010; Argumedo & Wong, 2010). These fields are not dormant, though, and certainly have not been abandoned; if anything, they are just as vital under fallow as they are under cultivation, providing a home to a range of wild plants⁵⁰ that are used for an array of alimentary, medicinal, artistic, and ritual purposes, while crop remnants provide fodder for livestock⁵¹ (Argumedo, 2008; Scurrah, et al., 2008).



Agricultural fields elsewhere in the Urubamba Valley (Ollantaytambo); Note the sharp restriction of crops in both horizontal and vertical space (esp. the lack of andenes)

⁴⁹ Here *sara* is found intercropped with *kinwa*, *alwirhas* (beans and peas), and *sapallu* (squash), between 3,150 and 3,400 masl. *Papa* cultivation begins at approximately 3,600 masl, intercropped with *hawas* (fava or broad beans) and *kinwa*.

⁵⁰ Argumedo and Pimbert (2005) note that the distinction between ‘wild’ and ‘domesticated’ crops is hazy in the *Parque*, owing in large part to the flow of genetic material between the two.

⁵¹ Part of the year livestock graze in recently harvested *chakra*, then on harvest residuals like chaff, husks, and peels, after which (during the summer months) they are pastured in upland, unplanted fields (Rivera, 1998).



Above and below: field scattering, crop rotation, fallow, and intercropping in the Parque





Above and below: high altitude chakra of papa, climbing right to the summits of the Parque's mountains



Animal husbandry, as a traditional part of farming in the region, is fully integrated into cultivation, and many households keep Andean animals such as *alpaca*, *llama*, and *qowi*, as well as European species like *uyja* and *waca*. Traditional tools are also still the norm, including the *chakitaklla*, the Andean foot plough, seen as a necessary part of the upland *tikpa* (no-till) system that ameliorates erosion in vertical terrain (Scurrah, Ccanto, Zúñiga, & Grupo Yanapai, 2001; Silberner, 2008). These elements come together in a robust body of adapted-ancestral practices unique to the Andes, including characteristic terracing, ‘harvesting’ rain and ‘growing’ soil from bare rock, and expert creation and manipulation of micro-climates; as well as more common *chalo* (intercropping), *laymes* (sectoral fallow), crop rotation, nutrient concentration, field scattering, mulching, and composting (Altieri & Uphoff, 1999; Goland, 1993; Pretty & Hine, 2000; Rivera, 1998). Customary legal-ethical frameworks, governance institutions and social formations guide the process, so that the resulting systems of agro-ecosystem management are literally the embodiment of traditional knowledge within existing (and evolving) circumstances, varying from location to location and generation to generation. This gives rise to (or perhaps merely serves to reinforce) a deep respect for locality and autonomy, as Fernandez describes: “[i]n each *chakra* potatoes are sown according to what is appropriate in the circumstances. For this reason in the Andes no one will ever say: ‘potatoes are sown thus’, willing to set rules for it” (1998b, p. 225). The Andean Indigenous process of culturally-mediated, localized innovation and adaptation is endemic to the *Parque de la Papa*.

Integrated *In-Situ* Conservation

Contemporary Andean Indigenous communities utilizing traditional agricultural techniques and land nurturance practices contain a high number of what Muller (2009) calls ‘conservationist’ or ‘curious’ farmers. These *chakra Runa* do more than subsistence farming (defined as providing enough food to meet immediate needs), they also devote significant effort to the conservation, elaboration, and extension of genetic diversity in their fields. Argumedo asserts that the techniques employed to this end, along with the systems in which they are embedded, “emerged over centuries of cultural and biological

evolution and represent accumulated experiences of indigenous farmers interacting with the environment using inventive self-reliance, experiential knowledge, and locally available resources” (Argumedo, 2008, p. 47). Contemporary Quechua farmers’ success in preserving and augmenting the roster of Andean plant varieties has been noted – in fact, it has merited rather intense academic and industry-driven scrutiny (GRAIN, 2000). *Chakra Runa* here conserve landraces not by storing them, but by seeding them in particular locations, at particular times, in particular mixtures. Planting in a *chalo* (an ‘association-mixture’ of complementary plants, within and across species, so that their growth is enhanced) is the norm; along with *laymes*, or rest periods of between three and nine years between intense rounds of cultivation (GRAIN, 2000). When the fallow period is removed (as is invariably the recommendation of rural agricultural development programmes), soil-borne pests quickly gain a foothold (Scurrah, et al., 2008). Similarly, vertical and horizontal field scattering reduces risk and promotes genetic variation, since spatial diversity and verticality mean that crops root in diverse soils, at different slopes and orientations, receiving varying amounts of sunlight and moisture (Bolin, 2006; Goland, 1993; Rivera, 1998). Simply put: these techniques work. Independent research has found that the farmers who cultivate the greatest number of varieties, and thus conserve or even increase agro-biodiversity, hail from regions where long-fallow and land fragmentation are the norm, while agro-ecosystems with high functional diversity (species that perform disparate functions within the same ecosystem) are the hardiest and most resilient in the face of shocks (Godoy, 1991; Muller, 2009; Reid & Swiderska, 2008; Scurrah, et al., 2008). Traditional agro-ecosystems also hold a carefully nurtured variety of crop wild relatives, microorganisms, insect predators, pollinators, and wildlife, all of which support flourishing and enhance genetic diversity (Argumedo, 2008).

Because of the intergenerational efforts of its ‘curious farmers,’ thousands of *papa* landraces populate the *Parque de la Papa*, each known by name in the communities of Sacaca, Chawaytire, Pampallacta, Paru Paru, Amaru, and Cuyo Grande. At any one time, any *chakra* in any of the villages could contain a *chalo* of upwards of 150 different varieties of *papa* (Argumedo, 2010; Argumedo & Wong, 2010). Some landraces are planted solely in order to conserve them – a task that is neither easy nor cost-free, yet one barely recognized by global conservation authorities concerned with the dwindling of

agro-biodiversity (Scurrah, et al., 2008). Instead of remuneration or even ‘pride of ownership’ arising from these conservation efforts, farmers enjoy local recognition for their contributions to seed exchange networks, barter markets, and agro-biodiversity (Muller, 2009). Generations of experimental breeding of landraces have entailed selecting characteristics that permit flourishing in the thousands of ecological niches the valley contains. As a result, the *Parque* holds a wide variety of flora and fauna in various positions along a spectrum of cultivation, from wild to domesticated (Argumedo & Pimbert, 2005). In the communities, these diverse systems are seen as contributing to *rakinakuy*, which is, in turn, contributed to by *ayninakuy*. Further, since Andean thought asserts that order arises from chaotic interactions, the point is not to defeat agro-environmental stresses (producing stasis) but to balance them out (producing harmony). This is an additive undertaking, not an eliminative one – or as Vasquez puts it, “[w]e are dealing with a complicated world: incommensurable life forms exist together, precisely because each form of life that is born does not erase the previous ones” (1998, p. 103). A complex system cannot be streamlined, disciplined, compartmentalized, decontextualized, or made certain without damaging its foundation. Recognizing this, farmers buoy the resilience of agro-ecosystems, so that they may find a new equilibrium, through enhancing biodiversity (Argumedo, 2010; Argumedo & Wong, 2010). Infection, infestation, flooding, drought, and other ‘disasters’ are seen as indicators of imbalance, cues that trigger and guide inquiry and restorative action (Fernandez, 1998a).

The emphasis in conservationist agro-pastoralism and agro-forestry in the *Parque de la Papa* is always on processes and relationships, on learning and adaptation, in which uncertainty, complexity, and non-linearity are embraced (Argumedo & Wong, 2010; Pimbert, 2006). Argumedo describes this management approach as “advocate[ing] for systematic experiments to be undertaken, developing alternative hypotheses, [and] supporting adaptive learning to deal with constant change” (Argumedo, 2010). It is a collective project, undertaken by different actors who share the same ecosystem (Borrini-Feyerabend, Pimbert, Farvar, Kothari, & Renard, 2004). Such an Indigenous mode of inquiry is often described as a ‘conversation,’ a dialogue between different forms of life – an exchange, in other words. And like all exchanges in the Andes, ethics demands that this one be based on reciprocity. In return for providing sustenance to the *chakra Runa*,

the land receives *pago* (ceremonial offerings), crafted with care and offered with respect (Argumedo, 2008). In addition, agricultural activity involves adapting not only plants, but also traditional tools and techniques, while ensuring the continuity of underlying beliefs and principles. ‘Management’ is systemic, aiming at the nurturing of the land beyond the cultivated *chakra*, in territory both wild and domesticated. “In the *chakra* all converse,” writes Vasquez, “and this conversing is a sort of ‘revealing,’ of making the life contained in each one of us, whether *runas*, *allpas* or potatoes, issue forth” (1998, p. 90). Accordingly, nurturance of productive systems is a learning process without end, rather than a skill one can master.

Combating Climate Change

If diversity is a hallmark of Andean lifeforms, variability is also the key characteristic of the region’s climate, changing from day to day and month to month, as well as across seasons, years, decades, and epochs. Here, frost, hail, floods, and drought occur in cycles long and short, foreseeable and unpredictable (Rivera, 1998). As a result, Quechua farmers are among the most adaptable on Earth, their traditional methods and processes oriented around mitigation, adaptation, and resilience (Rivera, 1998). A millennia-long relationship with their territories has produced an understanding, predictive power, and sense of impact and interrelationship that perceives each element in the Andean agro-ecosystem as agentic – as Rivera notes, “even the weather is living and has a personality. It’s a very capricious animal” (2008, p. 198). To buffer against the increasing unpredictability of this force, farmers in the *Parque de la Papa* support and enhance genetic diversity within and around their *chakra* – agro-biodiversity, after all, “has been the cornerstone of livelihood security since the dawn of agriculture” (Nelson, 2008, p. 1). Diversity is the default mode of natural systems, allowing for persistence in the face of multiple and unpredictable forces, as the system selects from among its constituent elements the characteristics needed to adapt. The broadest possible genetic base creates a significant range of such characteristics from which to draw (Reid & Swiderska, 2008). This is more than a hypothesis: in cultivated fields worldwide, high agro-biodiversity correlates with enhanced survivance and adaptability, increasing

farmers' ability to cope with both natural and man-made threats. In the *Parque*, the gene pool includes the cultivated varieties found in the *chakra* (whose variety is always being increased), along with undomesticated species growing wild in the territory of the six communities. These crop wild relatives are critical to the process of adaptation, not only for their known qualities now being incorporated, but for the yet-undiscovered traits whose future incorporation may prove key to the integrity and perpetuation of the system as a whole (Dulloo, Hunter, & Borelli, 2010). Heterogeneity, being the very nature of *Pachamama*, is part of the ancestral logic of Quechua agriculture. The myriad practices that actualize this principle, developed over countless generations, have made the Andes in general and the *Parque de la Papa* in particular home to “one of the best examples of long-term, large scale experimentation in sustainable land use” (Argumedo, 2008, p. 52). As climate change increases the stresses in the agro-ecosystem exponentially and unpredictably, Quechua farmers are counting on the diversity they have created and the knowledge – inherited, refined, and developed anew – of how to maintain it (Silberner, 2008). Sustainability, sequestered as an ‘issue’ in mainstream approaches to agriculture and conservation, is here an overriding concern in every sphere – not just sustaining crop production or the integrity of the environment, but also the substance of the adapted-ancestral practices, knowledges, expressions, and structures with which they interdigitate.

Localization of the Economy

The *Parque de la Papa* exhibits what is often referred to as a ‘biodiversity-based subsistence economy,’ in this case meeting its nutritive and other material needs through agriculture. Subsistence agriculture in the *Parque* is not just a matter of the field-to-table transfer of crops, though. Instead, it is built out of the traditional diversification of crop uses. From the initial harvest, the highest quality specimens are set aside for social exchanges, household consumption, and ceremonial practice. The second-highest quality specimens are earmarked as seed, used for *truki* (barter), or put up for sale (where families participate in commercial exchanges) (Argumedo, 2010; Argumedo & Wong, 2010; CIP, 2008b; Colchester, 2003). In cases where the household sees an imbalance in its productivity – one crop outperforming another – some high quality specimens may be

diverted to an exchange that specifically addresses that lack (for example, bartering an abundance of *papa* for a dearth of good *sara*, with a family who finds itself in the inverse predicament) (S. L. Skar, 1979). The lowest quality specimens are either transformed into other goods (for example, *ch'uñu* or *moraya*) for immediate or future use, or else repurposed as animal feed, to return their energy to the *chakra* as fertilizer (Argumedo, 2010; Argumedo & Wong, 2010). The idea of accumulation, in the capitalist sense, is foreign to this system, if not antithetical; interlocking and deeply held principles of complementarity, balance, and reciprocity leave no conceptual space for it. Profit, then, must be distributed and redistributed in a way that conserves proportion and sufficiency. Accordingly, commercial earnings fall under a confederacy-wide agreement to share the proceeds according to community needs and cultural norms (ANDES, 2011a; Argumedo & Wong, 2010). In the *Parque de la Papa*, most of the profit netted derives from the work of economic collectives whose members endeavour to beneficially channel the region's trade in tourism.

Women's Economic Collectives

The Andean principle of *yanantin* describes a duality or complementarity of opposites, a far-reaching idea modelled on the conjugal pair. The social-intellectual manifestation of this principle sees Indigenous women as the keepers of a different knowledge set than Indigenous men (Argumedo, 2010). In Quechua communities, women hold particular knowledges in aesthetic, scientific, and practical spheres (in addition to agricultural knowledge), which find expression in traditional crafts, medicines, and food. Work as artisans, healers, and culinarians is as biodiversity-based as work in agriculture, since close relationships with traditional plants, animals, and places figure in all of these engagements. Right across the Peruvian *altiplano*, economic stresses are pushing women not only into greater poverty and out of traditional roles altogether, but additionally eroding the range of their customary pursuits, concentrating their labour that remains in traditional spheres, in agriculture. In the process, women's teachings in particular are de-prioritized, the diversity of the local knowledge base as a whole is significantly reduced, and the cultivated, creative harmony of *rakinakuy* is

abrogated. Traditional knowledge is neither esoteric nor archaic; it is vivified in application. Realizing this, in the *Parque de la Papa* conscious efforts to resurrect women's knowledge by renewing its relevance to contemporary Quechua life are underway. These efforts fall under the rubric of the economic collectives *Q'achun Waqachi*, *Sipas Warmi*, and *Ñaupá Away*.



Weaver with the Ñaupá Away women's economic collective, working on a telar de cintura (backstrap loom) outside the communal handicrafts workshop in Pampallacta

In 2004, Sacaca, Chawaytire, Pampallacta, Paru Paru, Amaru, and Cuyo Grande held a competition to determine the best cook of a particular dish: *mirinday*, a recipe that makes use of traditional foods like *papalisa* (a tuber), *qowi*, and *ch'uru* (snail). In addition to featuring local ingredients, *mirinday* is also a common meal at *mink'a* (particularly during spring sowing), making it a Quechua traditional food both in form and function. That friendly culinary rivalry evolved into a cooperative of women – the *Q'achun Waqachi* – that now operates a *mikhuna wasi* (restaurant) in Chawaytire, serving visitors local recipes made with local ingredients. This initiative is a key part of the work of positioning the *Parque* as a 'gastronomic sanctuary,' a protected area where Quechua foods enjoy precedence and their consumption is actively nurtured. At the *Papamanca* (named for an Andean earthenware pot used for cooking tubers), the cooks may select ingredients from among the 260 varieties of *papa* currently grown within sight

of the restaurant's front door (Silberner, 2008). Rather than circumscribing the daily routine of the cooks involved, though, the restaurant opens only for parties of visitors and on special occasions (Dias & da Costa, 2008).



Cooking in a papamanca, in the Papamanca
(photo credit: Tran-Thanh, 2008)

Rufina Cruz, one of the original women founders, sees the restaurant as, in part, a response to the abandonment of traditional foods, as the six communities began to sell their crops and subsist on imported rice and pasta (Murphy & Townsend, 2010). This pattern has been one of the hallmarks of colonialism in Indigenous societies all over the world, most of which are still grappling with strategies to combat the ebbing of culinary custom (and accompanying declines in health). Beyond the use of traditional foods, or

bringing them back in traditional settings like communal work parties, traditional ways of cooking them are also being resurrected; moreover, the women are undertaking this relearning and adaptation collectively. The dense nutritional content of the local *papa* varieties, coupled with their ancillary health benefits,⁵² allow the *Papamanca* to assert the label of a ‘functional foods’ restaurant, thereby dovetailing with a local project to develop and market the *Parque*’s organic *papa* varieties as nutraceuticals (ANDES, 2005; Argumedo & Stenner, 2008; Dias & da Costa, 2008; KOHA, 2011).

The *Sipas Warmi* collective began as a training programme for younger women in the *Parque* who had been denied equitable access to formal education and health care. In addressing the former imbalance, lessons were organized, covering reading and writing in *Runasimi*, mathematics, computer literacy, and business skills (Argumedo & Stenner, 2008). The latter constraint was more complex, since a combination of internal and external forces had both ‘pulled’ the communities away from traditional medicine and ‘pushed’ them toward the uptake of state health programmes,⁵³ wherein *Parque* residents invariably find themselves paying for care that is both inadequate in breadth and inequitable in delivery (Tobin, 2001). Therefore, in addition to the skills and literacies that confer bicultural functionality, *Sipas Warmi* sought to catalyse a mentor-apprentice relationship between the communities’ older and younger Quechua women, focusing on the intergenerational transmission of traditional medicinal knowledge (including the practice of herbalism and the growing and processing of medicinal botanicals). A variety of medically active plants grows in the *Parque*, each of which has a long history of use in Quechua healing.⁵⁴ Thriving in fallow *chakra* and ‘wild’ areas of the park, many of these botanicals have multiple functions, including providing fodder for livestock. Funding raised by ANDES paid for the construction of a medicinal plants training and processing centre, where *Sipas Warmi* develops and packages natural medicines and toiletries, while

⁵² For example, yellow and orange varieties contain zeaxanthin and lutein, potent antioxidants, while purple and blue ones provide anthocyanin (USDA, 2005).

⁵³ Ironically, a mirror-inversion of this trend simultaneously tracked through mainstream society, where more and more people were using ‘natural’ preparations, and pharmaceutical companies were focusing increasing amounts of research and development funding on ‘natural’ preparations and plant-derived drugs (Rigolin, 2010).

⁵⁴ These include *ch’uka* (medick or burclover); *yahuar chonka* (pink evening primrose); *pinku pinku* (horsetail); and an Andean lady’s mantle (*Alchemilla pinnata*); along with various grasses (such as *Aciachne pulvinata*); asters (including *Paranephelius uniflorus*); and catchweed (*Galium eparine*) (Argumedo, 2010).

elsewhere in the *Parque* six traditional pharmacies have been established to provide residents with safe, inexpensive, effective medicines (ANDES, 2011a; Argumedo, 2008; Argumedo & Stenner, 2008). Profits from the sale of these products to *Parque* visitors are fed back into a fund that pays out to all six communities (ANDES, 2005; Colchester, 2003; Dias & da Costa, 2008). A plot of common land has become a botanical gardens for the sustainable cultivation of these normally undomesticated species, allowing the wild specimens to thrive without additional stresses or the risk of over-harvesting (Argumedo & Stenner, 2008; Dias & da Costa, 2008). These gardens are managed by another economic and knowledge collective, known as *Qantus* (ANDES, 2011d). Syncretic medical training has also been developed, providing Western health care practices that harmonize with traditional treatment options (Argumedo, 2010; Argumedo & Wong, 2010).



Wild plant-derived dyes used by the Ñaupa Away weavers

Agrotourism & Reforestation

In the past, Qosqo-based operators controlled tourism to the Urubamba region, deeming visits to the communities of the *Parque de la Papa* within their exclusive purview. Accordingly, the people of the *Parque* have seen very little benefit from tourism in general, despite the area being home to Inka sites, well-preserved colonial-era buildings, petroglyphs, and postcard-worthy natural vistas, including mountain lakes and

wildlife-sheltering wetlands (Argumedo & Pimbert, 2005; Argumedo & Stenner, 2008). An autonomous programme for controlling tourism was thus an obvious and early focus of community organizing. To ensure relevance to the lived experience of local people, and to properly root new practices in a traditional ethical frame, it was decided that tourism should orbit and support local agro-ecosystems. Benefits would be distributed equitably between participants; new infrastructure would serve the communities as well as visitors; visits would entail communication between farmers and guests, increasing awareness of Quechua societies in general and those of the *Parque de la Papa* in particular (especially the relationships between *Runakuna* and *tirakuna*); and all activity would be environmentally and socially sustainable (Vernooy, Jingsong, & Li, 2008). A tourism initiative would also support an argument that the communities of the *Parque* should be allowed to participate in the National Institute of Culture's management of local archaeological and sacred sites (Argumedo, 2008; Colchester, 2003). Ultimately, there is hope that a thriving local tourism project can stem outmigration of Quechua youth by providing economic benefits, an anchor for cultural engagement and pride, and a shared practical undertaking linking teens and Elders (Argumedo, 2008). To this end, a research and visitor's centre (the *Parque's* Interpretation Centre) has already been built in the community of Sacaca. Here, guests are ceremonially greeted and oriented to the area using a scale model of the valley, developed endogenously through participatory mapping exercises. Displays of native *papa* line the building's shelves; while guided walking and hiking trails that begin here wend through demonstration plots of tubers, a seed storage facility, greenhouses, artisans' workshops, wildlife refuge areas, and the *mikhuna wasi Papamanca* (ANDES, 2005; Argumedo, 2008; Dias & da Costa, 2008). For their part, the guides put forward by the six communities have formed an economic collective, *Willaqkuna*, to coordinate their activities and skills, and to share the rewards of work in common (Argumedo, 2010; Argumedo & Wong, 2010). Outside of walking and hiking excursions, homestays offer language immersion, traditional meals and lessons in how to prepare them, and opportunities to exchange knowledge (Argumedo & Pimbert, 2005). The Interpretation Centre also hosts the medicinal plants collective, and serves as the *Parque's* administration hub and main building (Argumedo & Stenner, 2008; Farmers' Rights, 2006/2007).

The tourism initiative has also lent both impetus and funds to native reforestation efforts on critical lands. Ironically, these efforts grapple not only with environmental degradation but also with the negative impact of state-sponsored afforestation projects carried out in the 1940s and 1950s. At that time, fast-growing *yukaliptu* (eucalyptus), along with cypress and *pinu* (pine), was a common choice for governments seeking to provide cheap, readily-available fuelwood to ‘developing’ rural communities. *Yukaliptu*’s impressive growth rate does not come without cost, though: the species is invasive, and land around it dries quickly as the plant’s roots expediently siphon off water, actually lowering the water table – an effect witnessed firsthand in the *Parque* (Argumedo, 2010; Colchester, 2003). Aside from cheap fuel, the shrub serves no real purpose in this environment, failing to provide the ecological niches that birds seek in stands of native *queña* (palo) and *cheqche* (fiddlewood), or any of the traditional medicinals, fertilizers, and fodder the communities utilize (Argumedo, 2010; Colchester, 2003). Further, native species, instead of removing nutrients, actually fertilize the fragile Andean soil; while residents assert that Indigenous trees provide some measure of protection against pollution from neighbouring towns and cities, as well as having independent, inherent value to the Quechua (Colchester, 2003). Of course, tourists find groves and glens exceedingly attractive, particularly when they break up an otherwise low-growth horizon – this preference is especially relevant in the Qosqo area, where the hillsides turn from a rich green to a muted brown at summer’s end (coincidentally, the start of the tourist season in the southern hemisphere). The fact that the original forests in this area were cut down to feed the Spanish silver mines, back in the 1700s, lends an ironic symmetry to an outsider-oriented project to reintroduce those same native species. Nevertheless, it is an unqualified good that established nurseries are now actively sheltering thousands of seedlings of Indigenous trees and shrubs in the *Parque de la Papa* (Colchester, 2003).



View of one of the Parque's wetland areas from the mikhuna wasi Papamanca

A Local Creative Solidarity Economy

While tourism-based economic initiatives are principally engaged in by the *Parque's* more centrally located communities, across all six villages production surplus figures in non-monetary exchanges, either being bartered or used in *ayni*, *mink'a*, or other social interchanges. A small amount will flow through the commercial market, where it usually fails to command a fair price, and consistently nets less than an exchange that occurs in a *qhatuy truki* (barter market)⁵⁵ (Argumedo & Pimbert, 2010; Scurrah, et al., 2008). Small-to-no reserves of hard currency, along with limited access to equitable commercial exchanges through which hard currency could be obtained, reinforces the use of goods-for-goods conduits; while fluctuations in commodity prices globally (particularly declining terms of trade in primary goods,⁵⁶ which hits developing countries

⁵⁵ In barter markets, for example, rainforest fruits net less in an exchange than coffee, because coffee takes much longer to grow and requires more intensive care. The inverse is true in commercial markets (ANDES, 2005).

⁵⁶ Declining terms of trade refers to the falling price of exports relative to imports, which hits producers of primary goods (unprocessed agricultural products like raw fruits and vegetables, for example) particularly hard. This is one of the principal reasons development programmes have invariably pushed a segue into manufacturing throughout the Global South.

hard) do not impact *qhatuy truki* to nearly the same extent (ANDES, 2005; Argumedo, 2008; Murphy & Townsend, 2010). Nutritionally the network of these markets (*chalaypasa*) is essential both in securing sufficient calories and in obtaining the proper ratio of macronutrients across those calories, so that the traders' households are consuming a balanced diet of culturally relevant foods (Marti, 2005, as cited in ANDES, 2005; Argumedo & Pimbert, 2005; Pimbert, 2006). To the markets, rainforest communities bring fruits and certain vegetables (containing critical micronutrients like potassium and sodium, plus essential fatty acids) and coffee. Carbohydrates from *papa* and *sara*, as well as legumes, grains and pseudograins, and vegetables such as *ripuyllu* (cabbage) hail from the mid-altitude zones; and protein (*llama* and *alpaca*, often preserved as *ch'arki* or dried meat, along with *qowi*) are brought down from the middle and uppermost elevations (ANDES, 2005; Colchester, 2003; Scurrah, et al., 2008; Stolton, et al., 2006). Medicinal and spiritually significant plants are also region-specific, growing in particular habitats, and must be traded between the *yunga*, *quechua*, and *puna* zones. In fact, the Quechua sacrament of *kuka* cannot be cultivated at the altitudes they principally occupy, and must be obtained from communities in lower zones⁵⁷ (Young, 2004).

Because it is household-centred, concerned with integrating production with needs while beneficially skewing food intake, mothers and wives are the key actors in *truki* (Argumedo & Pimbert, 2010; Argumedo & Wong, 2010). In fact, only men without partners can participate in the markets, whereas any woman can trade any amount of any good (ANDES, 2005; Argumedo & Pimbert, 2005). These women ensure that individuals and families with limited means or those experiencing temporary hardship are food secure by consciously tipping exchanges in their favour, while it is common for different households to lend one another goods to exchange (Pimbert, 2005). Accordingly, *truki* acquisitions support subsistence, being consumed directly rather than re-circulated. In the last thirty years the proportion of each family's needs being met this way has increased steadily, so that the *qhatuy truki* in the Urubamba Valley now constitute the second most important subsistence mechanism in the *Parque de la Papa* (after each household's own *chakra*) (Argumedo & Pimbert, 2010). Held once a week,

⁵⁷ *Kuka* is cultivated between 800 and 1800 masl, typically in the higher Amazon areas.

these markets channel fifty tonnes of food every day they operate, beating distribution of food assistance⁵⁸ ten times over and far outpacing commercial food purchases (Argumedo & Pimbert, 2005, 2010; Pimbert, 2005). Relatively stable and locally controlled, barter markets have become an increasingly common feature of Indigenous areas of the *altiplano* (ANDES, 2005).



Truki market in Lares, Qosqo province (photo credit: ANDES, 2011b)

Vertical trade of this sort has always been part of Andean Indigenous Peoples' subsistence strategies, so much so that *qhatuy truki* are considered emblematic of Quechua and Aymara cultures (Argumedo & Pimbert, 2010). Although they predate even the Inka, barter markets were suppressed by the Spanish and only began to re-emerge as an economic institution in the wake of the dissolution of the *haciendas*, when some Indigenous communities regained control of productive land, and roads began to connect market towns (ANDES, 2005; Colchester, 2003). Today, because of the functioning of the markets, the relative physical isolation that translates into social/economic remoteness between Peruvian and Indigenous groups – even those in the same eco-zone – does not estrange the disparate Indigenous communities stretched across

⁵⁸ Perú's National Programme of Food Assistance provides food aid to rural and impoverished families.

the entire vertical expanse of the Andes. Further, a need to centralise or streamline the *chalaypasa* has never been felt, and the network functions efficiently as a kind of acephalic confederation of diverse institutions, themselves elements of polycentric communities (found alongside, for example, women's collectives, households, and community assemblies) (Argumedo & Pimbert, 2010; Pimbert, 2006).

The markets' patterning of diets, regional productivity, and governance and management systems, filling in gaps and integrating pockets of habitation into a coherent whole, creates beneficial order out of relative chaos, achieving *rakinakuy*. Social solidarity, traditional production, genetic diversity, and food security are all simultaneously enriched. The fact that *ayninakuy* sets the ethical and social terms of all Andean exchanges means that goods are traded based on their practical utility, biophysical properties and heritage, spiritual character, and the effort invested in their production. As well as the principle of reciprocity, complementarity (*yanantin*) also figures here: those who have a particular good trade with those who do not, so that 'resource bundles' are best matched up as opposites who complete one another. As well as *ayninakuy*, *yanantin*, and *rakinakuy*, affection, empathy, and solidarity play roles in the flows through the *chalaypasa*, which is "not only a material exchange network, but also a symbolic and friendship network" (Argumedo & Pimbert, 2010). Every exchange affirms one's socially/culturally and geographically/ecologically located place, as well as the relationships that bind individuals to one another. The exchange of *yapa* (an extra amount of goods) after each trade speaks to this fact, as women acknowledge their interconnectedness and shared intention to come together again, in future, as friends and trading partners. This practice describes more than a socially embedded economy (Polanyi, 1944/2001). It also exceeds (or transcends) a simple de-prioritizing of exchange-value in favour of use-value (Marx, 1867/1977), thereby eluding definition via either classical or neoclassical economic theory. The economy of contemporary Andean rural communities, normatively framed, is anchored in both society *and nature*, labour *and culture*, reflective of what Escobar (2008) calls biocentrism or *biopluralismo*. Fernandez, in fact, finds in this vision-practice a thorough subversion of the market itself: "[w]e have [...] assimilated the market by making it one more arena for reciprocity – that is, to exercise the desire to give that is typical of us – and for Andean interpersonal

relations” (1998a, p. 134). The communities, for their part, refer to their system as a ‘local creative solidarity economy,’ where autonomy is a property of the group as a whole as well as of the individual farmers (Communities of Cusco, 2009).

The Culture of Seed

A particular subset of trade in the *Parque de la Papa* takes place through the communities’ networks of seed conservation and exchange, institutions which are key elements of cultural heritage in biodiversity-based subsistence economies the world over (Muller, 2006). Sustaining agro-ecosystems necessitates that seed be assessed and improved on an ongoing basis and to the greatest extent possible, then diffused so that the process continues. Throughout history, seed exchange networks have been an essential part of this process (Dias & da Costa, 2008). The need for fresh germplasm is, to a certain extent, part of farming in any region or environment, as agriculturalists almost universally express the need for propagating material to be renewed. In the Andes in particular, *chakra Runa* speak of *samilla cansada*, a condition of ‘tired seeds’ that signals the impending collapse of the variety itself without timely, focused intervention. In the *Parque* today, the need for new seed may be underwritten by the stresses of survival in an increasingly volatile environment, including the loss of whole crops due to extreme weather events or the forfeiture of breeding material after a less productive growing season (since people and/or livestock may need to use tubers meant for propagation as food). Infrastructure development and climate change have increased the incidence of viruses and pests exponentially, while agricultural aid and extension programmes have brought untested propagating materials that are insufficiently resilient, and additionally ill-suited to the *altiplano* environment (Scurrah, et al., 2008). In Perú, the quality and performance of Indigenous farmers’ seeds has been independently proven to exceed commercially distributed varieties (Andersen & Winge, 2008). Beyond issues of biological viability and suitability, the anonymity of commercial propagating material erodes both the social character of seed itself (each clonal and seed-propagated tuber having a lineage and heritage, which is practically and often spiritually relevant) and the social embeddedness of the practice of seed exchange.

Because Andean ontology asserts the mutuality of existence, the act of sharing is culturally obligated in Quechua society, and this obligation is particularly strong in the case of seed (Swiderska, Argumendo, et al., 2006). In the *Parque de la Papa*, seed exchanges map the relationships between family members, households, communities, and even regions; taking shape as inheritances, fairs, gifts, exchanges within kin groups and villages, barter, and the institutions of *ayni* and *mink'a* (GRAIN, 2000). These gene flows, like all Quechua exchanges, are based on reciprocity: both seeds and crops are exchanged for equal quantities of material of a different type, simultaneously diversifying agriculture supports, diets, and landscapes (Swiderska, Argumendo, et al., 2006). In cases where stock is requested by entities who are not bound by Andean ethics or Quechua customary law, decisions are made through assessing the professed and perceived intentions behind the exchange: how the material will be used not just in the immediate future, but also the long term, and relatedly, whether the need being expressed is justifiable from a traditional perspective (Tobin & Taylor, 2009). These are all issues in which the interests and approaches of the communities run up sharply against those of outside actors. Navigating these encounters has necessitated the attempted development of terms and frames comprehensible to both sides.

Politicization of Issues

In the course of establishing the *Parque de la Papa*, ANDES developed a concept-model to simultaneously explain and steer the work underway, naming it 'Indigenous bioculturalism' (Argumedo, 2008, 2010; Argumedo & Stenner, 2008). The idea built on the efforts of the Quechua communities to gain protection of the *Parque* as a conservation area, and thus evolved as the *Parque* itself evolved; while also drawing from key academic work on traditional resource rights (particularly that of Darrell Posey) and understandings gleaned from participation in Indigenous fora (such as the guidelines developed by Erica I. Daes in her report, *Protection of the Heritage of Indigenous Peoples*) (Swiderska, 2006). As César Argumedo, director of ANDES, explains: "[i]n our conversations with people about [a] potato registry, we realized that it could be much bigger.[...] We say that the entire area could be a reserve, that we could use the concept of

a protected area to protect more than just land, but agriculture, Indigenous culture, and an entire way of life” (as quoted in Murphy & Townsend, 2010). In subsequent communications from ANDES and the *Parque* communities, ‘bioculturalism’ has appeared as appeals to Indigenous biocultural heritage, Indigenous biocultural (heritage) territories, and Indigenous biocultural (heritage) systems. Rather than being a novel concept, though, it – quite appropriately, one could argue – forms part of a wider initiative to translate Indigenous perspectives on the interrelationship between people and place into legal and policymaking terms.⁵⁹ It also constitutes an acknowledgement of, and an attempt to ameliorate, the discontinuities in existing conservation regimes, development models, and rights schema – systems which typically contradict where they overlap, and where they fail to overlap, leave problematic lacunae. The conservation, development, and rights-enhancing projects emblematic of NGOs, governments, and multilateral or supra-state agencies are both one-off and compartmentalized, attempting to contain Indigenous intellectual, cultural, and material heritage in discrete spheres, in order to quantify, potentially enhance, or better regulate them.

At its core, the concept of bioculturalism asserts that traditional knowledges, practices, and territories (including their constituent lifeforms and features, glossed as ‘resources’) form a seamless whole. Indigenous territories provide the physical space in which knowledges, practices, and ‘resources’ are transmitted; and Indigenous Peoples are the agents of this transmission, having inherited, developed, and pursued customary land-based and place-specific lifeways for generations beyond counting. The three (knowledge, practice, territory) are inter-reliant, arising from and regenerating one another, and must be recognized as the collective heritage of Indigenous Peoples. This heritage encompasses tangible/physical and intangible/immaterial elements: customary law, narratives, values, ceremonial practices, knowledge, knowledge systems, innovations, economic strategies, biodiversity (at the genetic, variety, species, and

⁵⁹ Mead (2005) argues that the same concept of bioculturalism can be seen, predating ANDES particular definition, in the work of Call of the Earth / *Llmada de la Tierra*. Additionally, while the legal and commonly-used concept of ‘cultural heritage’ has typically focused on ‘monumental architecture,’ in the late 20th century it was expanded to include natural and sometimes massive areas of cultural significance, including entire landscapes (Brown & Mitchell, 2000). This shift occurred independently of ANDES’ individual efforts, though almost certainly resulted from the contemporaneous lobbying of various Indigenous groups and the articulation, particularly as United Nations fora, of Indigenous perspectives.

ecosystem levels), and ecosystem maintenance activities (Argumedo, 2008). As a system, Indigenous bioculturalism exists in the multiple forms that communities take, such as the *ayllu* in the Andes, the *ejido* and *milpa* in Mexico, the *resguardo* in Chile, the *comarca* in Panama, and the *miskito* in Nicaragua. Each of these is a fundamentally holistic, political/economic/social, encultured manifestation of a particular worldview. These specific incarnations, and other Indigenous social formations the world over, can be thought of as *territorialities* – territorialities under siege by an array of forces (ANDES, 2011a). The working definition being promoted by ANDES’ key INGO partner states that, “Indigenous Biocultural Systems are complex systems of interconnected and interdependent parts that emerge out of long term interactions between indigenous peoples and their natural environments based on a reciprocal relationship” (IIED, 2009, p. 18). ANDES itself provides a more robust account:

Biological and cultural heritage are inextricably linked through the interaction between local peoples and nature over time and shaped by their socio-ecological context. This heritage includes the landscape as the spatial dimension in which [this] evolution [...] takes place. The heritage is passed on from generation to generation and developed, owned and administered collectively by indigenous communities according to customary law. (Argumedo, 2008, pp. 49-50)

As a model, ANDES has introduced ‘Indigenous biocultural heritage areas’ (IBCHAs) into high-level discussions of conservation and development, defining an IBCHA as “a community-led and rights-based approach to conservation based on indigenous traditions and philosophies of sustainability, and the use of local knowledge systems, skills and strategies related to the holistic and adaptive management of landscapes, ecosystems and biological and cultural assets” (Argumedo & Wong, 2010, p. 84). Included in this paradigm is a set of state-legible positive and defensive protection mechanisms, which ANDES asserts distil the best of contemporary science, existing conservation models, and rights-based governance approaches (Argumedo, 2010). This strategy has been framed as one of ‘epistemic bridging’ linking traditional and Occidental scientific knowledge frameworks, particularly in terms of agro-biodiversity; the concern being not the maintenance of existing genetic diversity, but its active, reciprocal nurturance in Indigenous communities (Argumedo, 2008). ANDES has also proposed

the *Parque de la Papa*, because it is a functioning IBCHA, as a *sui generis* system for the protection of Indigenous traditional knowledge (ANDES, 2005). It situates that knowledge (and the innovations and practices it gives rise to) within a cultural, geographical, and temporal matrix, and asserts that Indigenous Peoples have the right to control the use of that knowledge for their own benefit, according to endogenous needs, community aspirations, and customary laws (Argumedo, 2008).



*Uncultivated land in the Parque,
connected to chakra in front and behind*

Further, protection – as project and imperative – is not limited to knowledge (Argumedo, 2008). Locally and nationally, ANDES and the *Parque de la Papa* have employed the concept of ‘bioculturalism’ to try to impact policies that directly affect the communities, pushing for the integration of ‘biocultural heritage’ into state and provincial

structures governing protected areas/conservation and rural development.⁶⁰ The hope has been to put a halt to policies that undermine bioculture, if not to spur the development of ones that actually support it (ANDES, 2005). In the *Parque*, the concept-model has given rise to a range of adapted tools and practices that are consonant with Quechua custom and perpetuate life in (and as) community. Broadly, these include turning to the local agro-ecosystem to forge alternative economies; basing sustainability on traditional values (particularly gratitude to *Pachamama*); and rooting agro-ecosystem management in customary law, norms, and institutions, along with traditional organizations for collective action (Argumedo, 2008; Stolton, et al., 2006; Swiderska, Argumedo, et al., 2006). Further, while asserting a right to pursue and preserve traditional systems, ‘biocultural’ models recognize a corresponding responsibility for Indigenous Peoples to conserve and transmit these systems to coming generations (Swiderska, 2006).

One of the key barriers to the success of this undertaking is, and always has been scientific reductionism and the concomitant de-politicization of Indigenous issues. These perspectives, and projects rooted in them, consistently strip away the issue of land ownership and tenure; approach culture as an affectation or choice, and view ‘rights promotion,’ ‘food security,’ ‘resource protection,’ etc. as singular undertakings, uncoupled from other substantive claims and disembedded from their particular social, economic, cultural, and ecological contexts. ‘Bioculturalism’ attempts to repoliticize and reintegrate these concerns, protecting their contemporary use, autonomous stewardship, and future transmission, in addition to calling for restitution of alienated elements of heritage (lands, knowledges, ‘artefacts,’ etc.). An overarching assertion, here, is that the bioculturalism concept-model reflects pre-existing, effective, tested approaches to what state, NGO, and academic institutions call ‘development’ and ‘conservation,’ and that many of these prior approaches still drive Indigenous communities’ adaptive responses to destructive phenomena and erosive stresses (whether natural or man-made). There is, therefore, scant need (and little defensible logic) to pursuing top-down initiatives that

⁶⁰ Bannister and Hardison invest considerable faith in this ‘policy change via awareness-raising’ approach, writing that, “more widespread use of the term ‘biocultural’ in conjunction with ‘biological’ may assist in fostering a needed expansion in awareness, particularly among some of the scientific and policymaking communities who may not yet see the reciprocal nature of direct and indirect biological and cultural interconnections” (2006, p. 24).

ignore or obstruct the optimal functioning of Indigenous territorialities. As a defensive strategy, Indigenous bioculturalism “entails linking different territorialities to provide not only a conceptual mantle under which to unite similar struggles, but also a bridge across which communities can provide one another with theoretical and practical assistance” (ANDES, 2011a, p. 2). It emerges automatically from a critical realization: that Indigenous Peoples’ struggles for food, health, education, shelter, and even culture, life, and flourishing are actually subsidiary claims, as they depend on the recognition and protection of an underlying, communal right to territory and autonomy. The denial of access to and control of territory – a denial that typically manifests violently – is an attack on Indigenous existence, since it forecloses the vital array of land-based practices that are collectively constitutive of Indigeneity. ANDES and the six communities of the *Parque de la Papa* view the dissemination of the ‘bioculturalism’ concept as important enough to use it as the ground of all of their dispatches and position papers. Re-politicization of these issues is thus seen as a communicative as well as a confrontational undertaking.

Communication of Ideas

The Quechua perspective of knowledge as discursively constructed means that communicative initiatives are not only about taking advantage of opportunities for collective statement-making, but also about the possibility and desirability of drawing others into dialogue. Within the *Parque de la Papa* (as well as at ANDES) such communication is most often talked about as an effort at ‘linking’ or ‘bridging:’ forging reciprocal connections between the *Parque* communities and other communities, between Indigenous and non-Indigenous systems and sciences, and between present and future generations. The *ayllu* as an organizational structure consciously constructed also influences Quechua approaches to communication. Locating one’s household within the nested structure of the *ayllu*, where wider and wider circles of affiliation create a sense of shared concern between autonomous groups, creates an urge to build *ch’aka* (bridges) that are both epistemic and affective.

Building Affective *Ch'aka*

Seven years ago, the communities of the *Parque de la Papa*, together with ANDES, successfully lobbied to establish a day of recognition for the country's *papa* varieties (Argumedo & Stenner, 2008). This co-initiative of the National Office for the Environment and the Ministry of Agriculture yielded *Supreme Decree 009-2005-AG* (September 2004), establishing May 30th as *El Dia Nacional de la Papa* ('National Day of the Potato'). The text of the legislation notes the 'goodness' of the *papa*, its role in Andean food security and cultural diversity, and the 'national pride' it inspires (Argumedo & Pimbert, 2005; Muller, 2009). From the communities' perspective, this was a significant step toward the goal of spreading the success of the *Parque* as an inspiration for others, while providing a key premise in the ongoing argument for a supportive policy environment (one in which Indigenous Peoples' have access to the resources necessary to develop novel products, manage their own agro-biodiversity, and successfully market their crops) (Argumedo & Pimbert, 2005). This national initiative led directly to the United Nations declaring 2008 the 'International Year of the Potato' (Argumedo & Stenner, 2008). Local efforts in this sphere were lent momentum by the fact that emerging analyses of economic globalization point to Perú having a comparative advantage⁶¹ in abundant and transgenic-free agro-biodiversity (Dias & da Costa, 2008; Lapeña, 2007). CIP has gone to lengths to emphasize the national and international economic potential of Andean tubers *per se*, because while the common, cheaply produced, standard white potato cannot currently be displaced from its position of commercial dominance worldwide, there is increasing demand for novel, high-quality, and 'authentic' food products (CIP, 2008b; Dias & da Costa, 2008). As a result, the agendas of academics, politicians, businessmen, *campesinos*, Indigenous farmers, and NGOs found a common cause in the defence of Peruvian native crops and their derivatives (Muller, 2009). Pressure has been levied against the government to research potential markets for the commercialization of neglected and underutilized species, for the dual benefit of the country as a whole and farmers (especially small farmers) in

⁶¹ In economic theory, 'comparative advantage' refers to the idea that a country should focus on only those goods/services it can produce most efficiently (i.e. more efficiently than its competitors), and rely on imports to satisfy all other goods/services.

particular. A related, joint project between CIP, ANDES, and the *Parque de la Papa* revolves around generating income for the communities through identifying market niches for their tubers (CIP, 2008b). The goal is for the *Parque*'s unique varieties, their vivid colours corresponding to unusual, beneficial nutritional properties, to begin appearing in local supermarket chains (Farmers' Rights, 2006/2007). Indigenous farmers have always found access to the funds necessary to cope with unforeseen production problems, tightly restricted, so much so that they have essentially been locked out of the national agricultural credit system (Dias & da Costa, 2008).

Demand-side economics⁶² entails raising awareness in consumer choice – logically, since one cannot consume a product whose existence is a mystery – while providing incentives to motivate a particular, macro-economically beneficial choice. Despite their currently marginal contribution to the national economy, the economic potential of Andean native crops has coupled with (or motivated, depending on one's perspective) growing recognition of their environmental, cultural, and social significance, particularly their contribution to “the maintenance of lifestyles and traditions which are the essence of being Peruvian” (IIAP, 2004). Accordingly, *El Dia Nacional de la Papa* includes a variety of traditional and novel agricultural and gastronomic efforts around the country, including seed fairs, special restaurant menus, government ceremonies, and media campaigns, collectively meant to elevate the profile of the *papa*, highlight the importance of agro-biodiversity, and promote Peruvian agricultural products (Farmers' Rights, 2006/2007). These activities include:

a multiplicity of programmes, campaigns, books, magazines and bulletins that emphasize the gastronomic and culinary richness of the country. Not only this, they also highlight the regions from where products originate, the cultures that have maintained and conserved ingredients and recipes, the conservation processes of many of the crops used, and the wisdom and traditional knowledge from which innovations in the field of gastronomy have arisen. (Muller, 2009, p. 60)

⁶² Demand-side or Keynesian economics asserts that the best form of macroeconomic stimulation comes through increasing the demand for goods and services.

Spurring this unprecedented turn to the gastronomic local has been the recent attention given Lima as a culinary hotspot. In 2004 *The Economist* magazine referred to Peruvian food as one of the world's dozen 'great cuisines,' while the academic director of Le Cordon Bleu credits the quality of local cuisine with inspiring the opening of a branch of the school in Lima (de Patre, 2007). Consequently, foreigners and *Limeños* alike are buoying an already thriving dining scene, while Peruvian chefs are actively seeking out unique local ingredients to feed that momentum. Andean native *papa*, widely acknowledged as both gastronomically and nutritionally superior to more common cultivars, are thus undergirding a 'culinary revolution' that has become a leading reason to visit not only the capital, but also the highlands (GRAIN, 2000; Muller, 2009; Scurrah, et al., 2008). CIP has been actively feeding this trend, partnering with culinary institutes in Lima to promote student research into so-called '*Novoandina* Cuisine,' in the hope of creating a gourmet pedigree for the 'peasant' *papa* (Dias & da Costa, 2008). Products are being developed for specific markets, since tourists, gourmards, and the average consumer ostensibly have distinct palates (Dias & da Costa, 2008). This 'gastronomic boom' (or perhaps more succinctly, a boom in gastronomic tourism) is openly credited with pushing policy evaluation and (re)development around native crops, particularly "the revaluation of our genetic patrimony at all levels of society" (Muller, 2009, p. 58). A mere year after the inauguration of *El Dia Nacional de la Papa*, in fact, *Law No. 28477* (2005's *Law Declaring Crops, Native Breeds and Wildlife the Natural Heritage Usufruct of the Nation*) made the Ministry of Agriculture, local and regional governments, and other public and private organizations responsible for promoting the consumption of native crops, with a caveat that these activities focus also on sustainability (Muller, 2006). This has been widely painted as an important victory for both Indigenous *chakra Runa* and local *campesino* communities.

Building Epistemic *Ch'aka*

Throughout Latin America, *campesinos* have been vocal in their belief that agricultural research should have a point of origin somewhere within the self-articulated problems of farming communities, instead of those groups barely enjoying knowledge of

– never mind gaining knowledge *from* – said research (Scurrah, et al., 2008). In many cases, as well as proceeding according to external agendas (and appealing to predictable authorities, while supporting business-as-usual in terms of both methodology and results), research on agricultural systems and agro-biodiversity also deploys abstract concepts that, because they were not developed locally and consequently hold little meaning in that context, straddle the border between specialized lingo and outright jargon. Knowledge-generating partnerships, in order to be of use to the communities themselves, cannot serve to enrich theoretical debate or further intellectual pursuits tailored to, or isolated in, the academic or applied research communities. Nor can they neglect local participation, experience, or context (ecological, spiritual, social, economic, cultural, or political) (Pimbert, 2006). The communities of the *Parque de la Papa*, of course, are already involved in participatory research through their ‘Local Learning Groups’ and *technicos*, and this endogenous, collective knowledge-generation process is best suited to the teleology of the *ayllu* – but the communities are also keenly interested in engaging in wider-ranging, traditional-knowledge based research on food systems (ANDES, 2005).

As conceptualized by the six communities and ANDES, research partnerships between the *Parque de la Papa* and outside investigators would be “less about producing high quality specialised knowledge that can be used to solve a ‘problem’, and more about bringing different knowledge systems and people together to improve a complex situation” (Apgar, Argumedo, & Allen, 2009, p. 257). This goal of ‘epistemic bridging’ would necessitate an exploration of where Occidental-scientific and Quechua knowledge systems overlap or diverge; beginning with their disparate epistemologies, which produce distinct methodologies and ethics in/of research. To this end, ANDES has laboured to formulate a dual, collective model (something akin to the Euro-American model of complementary medicine) while consciously trying to avoid a homogenization of results in the search for common ground. Mutual sensitization, in which urban backgrounds and professional training meet rural experience and traditional knowledge halfway, is a key part of the process (Argumedo & Stenner, 2008). De la Cadena asserts that the emergence of these pluralist models “marks an epoch in that they terminate a four-centuries long split, [with] discussion of a different politics of nature” (de la Cadena, 2008b, p. 6). One example of a successful collaboration are the participatory,

topographic modelling exercises undertaken by a Geographic Information Systems specialist and the six communities of the *Parque*, the outcome of which was a three-dimensional map of the valley that now plays its own role in the generation of new, and the documentation of existing knowledge. *Technicos* utilize this model in facilitating collaborative investigations of local, land-based issues – mapping sacred sites and other culturally important areas, showing crop and medicinal plant distribution, following wildlife populations, laying out social infrastructure, understanding tenure and control of access, mapping patterns of erosion and sedimentation, and tracking land use generally (Argumedo & Pimbert, 2005). As Argumedo and Wong note, this and other participatory mapping work “has focused on capturing the spatial knowledge of local people such as location, size, distance, direction, shape, pattern, movement and inter-object relations as they know and conceive it to develop Cognitive Maps, which are internal representation[s] of their world and its spatial properties stored in their historic memory” (2010, p. 89).



Explaining the Parque to tourists with the help of a 3-D model

There is also a core social justice orientation to the knowledge generation goals of Quechua communities engaged in participatory research. Part of the point is to find ways

to subject 'expert knowledge' to public scrutiny, catalysing a process of participatory critique that, hopefully, leads to marginalized groups having a stronger voice in setting policy and framing regulation (Pimbert, 2005). Alongside this effort can be found the parallel project of engaging government agencies in research processes, wherever appropriate, in order to both inject a divergent, critical (typically marginalized) opinion into policymaking dialogues and to share tactics on steering this process with other Indigenous communities (ANDES, 2005). Those voices are increasingly sought out in academic work and policymaking that attempts to grapple with agro-ecological adaptation, particularly as climate change, growing food insecurity, and the rapid degradation of productive land render industrial agriculture's footprint increasingly untenable. Sustainability is a core principle of traditional Indigenous land management practices, and as ecophagy becomes the definitive act of the neoliberal world food system, Indigenous Peoples are finally being invited to contribute their perspectives on and experiences with long term food systems sustainability. Some groups are responding, in the spirit of contributing valuable modes and models of complex-systems inquiry, having managed complex systems in their home territories for millennia (entailing embracing uncertainty; balancing multiple, multiscalar perspectives and processes; and navigating interdependency) (Apgar, et al., 2009; Posey, 2001). Andean Indigenous representatives have, more generally, also expressed an interest in building relationships with a global community dedicated to openly exchanging beneficial knowledges (Argumedo & Pimbert, 2005).

Partnerships between Occidental-scientific and Indigenous systems of inquiry will invariably present a problem for established knowledge regimes, though, particularly when it comes to issues of validity and reliability (both of which hinge on specific perceptions of authority and endorsements of methodology). Even cross-disciplinary academic research has been seen as necessarily problematic for the very same reasons (Robinson, 2008). In essence, these are political questions: who gets to frame the query, who will be allowed to engage in the investigation, and which traditions will be drawn upon in assessing the results. Quechua knowledge systems are well suited to navigating such tensions: fundamentally dialogic, premised on diversity as an inherent good, and procedural in nature, they are predisposed to drawing harmony from chaotic interactions.

Applying *rakinakuy* (equilibrium), *yanantin* (duality), and *ayninakuy* (reciprocity) in research, ANDES has initiated a peer-reviewed journal – *Sumaq Kausay*⁶³ – that brings together investigators and authorities from several distinct, even insular spheres. Criteria for inclusion and a unique review process are being developed by an editorial board that includes Indigenous knowledge-holders, activist-intellectuals, community organizers, and doctorates, a collective that, by its very existence, seeks to redefine the ‘peer’ designation.

Documentation as Defence & Discourse

Within the *Parque de la Papa*, a commitment to alternative, Indigenous-language media takes shape principally as participatory video documentation of traditional knowledge, medicinal and agricultural practices, and local conservation initiatives. Groups of residents, primarily young women, have been trained in filming and editing footage, using digital cameras and computers, as well as attending hands-on workshops on reviewing, analyzing, and making choices about cutting and compiling material for both internal and external audiences (Argumedo & Pimbert, 2005; Argumedo & Stenner, 2008; Colchester, 2003). The organization that emerged from this training, the *Tijillay T'ika* Women’s Audio-Visual Collective, began producing footage in 2003, after participating in a twelve-day exchange with women ‘barefoot filmmakers’⁶⁴ from rural India the year prior (Argumedo & Pimbert, 2005). By documenting Indigenous knowledge, these visual records demonstrate ownership of that knowledge, while the communities learn from the experience of actively sharing these narratives and skills with others (Argumedo & Pimbert, 2005). The videos, in fact, meet the legal definition of a TK registry under Peruvian *Law No. 27811* (2002’s *Law Introducing a Protection Regime for the Collective Knowledge of Indigenous Peoples Derived from Biological Resources*). The key difference between the work of the Video Collective and most other registers, though, is that, as Dias and da Costa note, “[s]ince they control the cameras and the computers upon which the video is digitally stored, the Quechuas have no qualms

⁶³ See <http://journals.sfu.ca/sk-bsd/index.php/sk-bsd>.

⁶⁴ The filmmakers were with the Decan Development Society, a grassroots organization focusing on gender issues, and the Community Media Trust, a women's media collective (Dias & da Costa, 2008).

about logging every little detail of their knowledge. There is no anxiety that a non-Quechuan government official in Lima will release the information, or that it will end up in a public database monitored by pharmaceutical researchers” (2008, pp. 19-20).



Editing film footage: The Tijillay T'ika Women's Audio-Visual Collective
(photo credit: ANDES, 2011c)

Because Quechua is an oral culture, in which nonverbal methods and visual cues are extensively employed even in spoken narratives, video was felt to be the most appropriate recording technology (Argumedo & Pimbert, 2005; Gonzales, et al., 2010). The ability of video to capture the visual beauty of the *Parque's* flora and fauna was also considered most suitable to the strong Quechua sense of visual aesthetics. Besides the videos acting as a registry – which was never their sole purpose – a kind of ‘time capsule’ and genealogy of the *Parque de la Papa* itself has also taken shape, since the footage shot captured the evolution of community programmes and the development of collective conservation areas (Argumedo & Stenner, 2008). The women of the collective have amassed sufficient expertise in this exercise that they are now periodically hired to document events in the Urubamba Valley or nearby Qosqo, as well as preparing video documentation for *Parque* publicity or reporting purposes (Argumedo & Stenner, 2008). They have also, in the spirit of asymmetrical reciprocity, returned the gift of their training

by going on to train women in other conservation areas. Elsewhere in the communities, discussions have raised the possibility of other Indigenous-language media projects, and plans are underway for radio programming in Runasimi, to be broadcast throughout the valley and archived online, discussing the conservation and sustainable use of the *Parque* agro-ecosystems.

Collaboration across Borders

The free exchange of knowledge has been critical to the success of the *Parque de la Papa*. Among the preliminary steps taken in developing the current governance model was a visit to Taquile, a comparatively isolated community on Lake Titicaca; and an excursion to the Gran Chaco protected area in Bolivia. In Taquile, *Parque* representatives drew inspiration from an ecotourism project founded on Indigenous principles and managed according to local custom, and in particular from the adaptation of traditional conflict resolution mechanisms in the community. The Bolivian trip focused on gleaning lessons from community-led conservation of critical ecosystems (Argumedo, 2008). The success of these excursions, coupled with the growing number of requests for other Indigenous communities to visit the *Parque*, have led to the implementation of ‘contact learning zones’ as a tool for action research, information dissemination, and South-South technology transfer. These zones of interaction are constructed to allow peoples separated by history or geography to “engage in dialogue, creating horizontal and democratic spaces of intercultural practice, inquiry, and participatory learning, replacing colonial legacies of coercion, inequality, and conflict, with sharing and solidarity, participatory knowledge discovery, cooperative management of knowledge and the fostering of interdependent horizontal networks” (Communities of Cusco, 2009, p. 2).

While visits abroad have yielded important information, reciprocal exchanges have proven the most fruitful. The communities of the *Parque de la Papa* have dialogued and workshopped with the Deccan Development Society of Pastapur (India), which was a key contributor of tested models and innovative ideas for the protection and transmission of Indigenous knowledge; and Tahuri Whenua, the national Māori vegetable

growers collective (IIED, 2002; KOHA, 2011). In late 2010, the *Parque* and ANDES organized and hosted the first leg of a reciprocal exchange with the village of Doko, Ethiopia. Gamo Elder Shano Shale, along with four Ethiopian academics, visited the Quechua communities to discuss the adaptation of the *Parque* model, spurred by the similarities of their respective contexts and perspectives (Murphy & Townsend, 2010). Both the Quechua and the Gamo are Indigenous high-altitude agriculturalists⁶⁵ whose traditional subsistence activity orbits a key tuber (*papa* in the case of the *Parque* and enset⁶⁶ in Doko). Both are struggling with climate change alongside the erosion of the cultural systems that could best deal with its local agro-ecological fallout. The people of Doko spent time with the communities' *technicos*, and examining the work of the Local Learning Groups and economic collectives, to evaluate the potential of an 'Enset Park' in the Ethiopian highlands. The parallel between *papa* and enset was particularly important from a strategic perspective: as Ethiopian plant geneticist Tesema Tanto notes, "[i]n preserving the flagship, you preserve the rest of the environment as well" (as quoted in Murphy & Townsend, 2010).

Currently, representatives from the *Parque de la Papa*, through ANDES, are working with organisations in three global regions to adapt and disseminate the *Parque*'s approaches – not as a template, but as a source of inspiration and a starting point for local discussion (Argumedo, 2008). With climate change reshaping agriculture the world over, these exchanges, which currently prioritize Indigenous interaction in pursuit of food sovereignty, do not exclude knowledge-sharing with non-Indigenous groups (particularly other small farmers, pastoralists, women's organizations, and migrants) (KOHA, 2011; Pimbert, 2006). Even restricting analysis to the Peruvian context, these kinds of transboundary alliances, the forging of ever-wider *ayllu* and expanding circles of concern around shared issues, have already proven effective in monitoring and resisting state, inter- and supra-state, and corporate pressures – for example, critiques of and mobilizations against free trade areas, terminator technologies and genetically modified organisms (GMOs), and privatization (Argumedo & Stenner, 2008). Pimbert (2005)

⁶⁵ Doko sits at 10,000 feet, in the Gamo Highlands of southern Ethiopia, overlooking the Great Rift Valley.

⁶⁶ Enset (*Ensete ventricosum*), also known as 'false banana,' is a traditional staple in the Southern and South-western part of Ethiopia.

asserts that such partnerships and networks hold great promise, providing that the participants share a commitment to equity, decentralization, and diversity.



Discussing tuber cultivation with Gamo Elders and scientists (photo credit: ANDES, 2011c)

Hybridization of Laws

A key partnership undertaken by the six communities, led by ANDES, has been with the Lima-based *El Centro Internacional de la Papa* (CIP) – its beginnings, though, are not found in commitment to shared values or solidarity in their actualization. Since the 1960s, CIP has been collecting germplasm from the area the *Parque de la Papa* occupies, without either asking the communities' permission or offering them any form of compensation (ANDES, 2005). From the Quechua perspective, this kind of opportunism violates *ayninakuy*, the principle that governs all exchanges in the Andes,

while additionally (or consequently) disrupting the *rakinakuy* of the socio-political environment. Seed exchanges inside of Quechua territory (where CIP ‘harvesting’ took place) are regulated by customary law; seed thefts are uncommon enough to be significant events, referred to community councils. Under customary law, the injustice inflicted had to be understood and corrected in order to restore equilibrium. To this end, in 2004 representatives of the six communities approached CIP to ask that the organization comply with *derecho consuetudinario* and repatriate their stolen landraces (Argumedo & Pimbert, 2006). In preparing for the negotiations, the communities engaged customary, participatory processes of dialogue, collectively outlining a bargaining position that encompassed their immediate and longer-term concerns. Subsequent, substantive negotiation⁶⁷ resulted in the drafting of the *Agreement for the Repatriation, Restoration and Monitoring of Native Potato Agro-Biodiversity and Related Community Knowledge Systems (the Agreement)*.

CIP maintains the world’s largest bank of *papa* germplasm, including some 3,500-3,800 traditional Andean varieties and 100-140 wild species, as well as other tubers native to the region (Dowie, 2008; GRAIN, 2000; Nelson, 2008). Most of this impressive collection originated in the fields of Latin American Indigenous and local farmers, few if any of whom were compensated for those acquisitions, while everything housed in gene banks prior to the Food and Agriculture Organization’s *International Treaty on Plant Genetic Resources for Food and Agriculture* (FAO Treaty) was assumed to have been obtained with prior informed consent (GRAIN, 2000). CIP is a member of the Consultative Group on International Agricultural Research (CGIAR), established in 1971 to provide oversight and funding to a global network of research centres, and now considered the most influential agricultural research entity in the Global South (Dias & da Costa, 2008; Rigolin, 2010). All fifteen of the institutes that make up the CGIAR alliance support research on food crops ‘for the benefit of all humankind,’ meaning that none of the genetic material they hold is patentable, and all access is governed by clear contracts to that effect (Argumedo & Pimbert, 2006).

⁶⁷ During the negotiations CIP and the *Parque* worked together with a lawyer provided by the British INGO the International Institute for Environment and Development (Argumedo & Pimbert, 2005).

The legally binding *Agreement* between CIP and the *Parque de la Papa* is something quite different from the standard gene bank user contract. It commits the parties to jointly managing approximately 1,200 varieties, both cultivated and wild, in a dynamic conservation strategy that incorporates both *in-situ* and *ex-situ* maintenance of genetic diversity in the valley's agro-ecosystems (Argumedo, 2008; 2005; Nelson, 2008). Under the *Agreement*, CIP takes on responsibility for the cost of the first leg of the repatriation, in recognition of the benefits the organization has reaped from the Indigenous knowledge of the Qosqo region, along with providing technical assistance in multiple aspects of conservation of the new clonal stock (Argumedo, 2008; Stolton, et al., 2006). The *Parque* assumes responsibility for maintaining the seed and access to it for local farmers (Bridges, 2005). The *Agreement* further outlines a schedule for the repatriation of the original varieties removed from the communities, along with a scheme for sharing the benefits arising from their use in the intervening years (and the traditional knowledge that was 'collected' along with the *papa*) (Swiderska, Argumendo, et al., 2006).

In 2008, the first repatriations arrived in the *Parque*: 246 separate varieties, many of which had altogether disappeared from the stores and *chakra* of the six communities (Dias & da Costa, 2008). Cleaned of diseases, these renewed seed *papa* were planted in select *chakra* throughout the territory, and have subsequently taken up their rightful role in local food security, medicinal, and ceremonial practices (Argumedo, 2008; CIP, 2008b). 'Cleaning' seed potatoes, using meristem culture and thermotherapy, yields disease-free clones – not GMOs – that show improved hardiness and upwards of thirty percent increases in yield (CIP, 2008b; NRC, 1989). Diseases can be reintroduced, but re-infection takes as much as a decade, buying time for other, critical agro-biodiversity-supportive activities to proceed (NRC, 1989). Seed cleaning is thus a vitally important service for the farmers of the *Parque de la Papa*, not only because some of their current stock contains thousand of years' worth of accumulated tuber viruses, but also because climate change is rapidly affecting the lethality of existing diseases while introducing entirely new ones to already weakened stock (NRC, 1989; Scurrah, et al., 2008). In combination, these new threats are greatly impeding the ability of Andean agriculturalists to keep their *chakra* disease-free using traditional methods alone (Scurrah, et al., 2008).

When the Peruvian government offered the *Parque* new varieties of *papa* with which to improve productivity and combat the effects of climate change, the communities turned them down. Instead of propagating material that would require commercial inputs (fungicides, pesticides, and chemical fertilizers), they opted to procure new stock from CIP – clonal seed *papa* that had been grown and consumed in Urubamba for hundreds, even thousands of years (Silberner, 2008). The *chakra Runa* see CIP's banks as an extension of, or safety net for, the traditional Andean institution of seed exchange, as well as an insurance policy against crop loss through extreme events or uncontrollable outbreaks of pests or diseases (Scurrah, et al., 2008). Altogether, between 2004 and 2008, the *Parque* and CIP collectively repatriated almost a quarter of the communities' lost ancestral varieties held in Lima, including the original seven strains of *papa* brought under cultivation some seven thousand years ago (Dowie, 2008). Since *papa* and *Runa* are kin, this stands as a literal reintroduction to a living, ancient relative, and a step toward the restoration of the wider *ayllu*. ANDES and the *Parque de la Papa* assert that this is just the first step in their longer-term goal: the re-establishment of all of the world's known potato varieties in the valley (Colchester, 2003).



Virus infected (left) and laboratory cleaned (right) papa of the same variety
(photo credit: EMI, 2011)

Access to laboratory cleaning and disease-free stock is now being positioned as a key support for the ongoing, traditional adaptation and conservation of landraces within the *Parque de la Papa*, as well as for the associated economic systems, governance mechanisms, and cultural practices. It also helps efforts to revitalize customary seed maintenance technologies, knowledge of which has declined sharply in recent years (Scurrah, et al., 2008). Lino Mamani Huaracca, a *papa arariwa* (guardian of the native *papa*) from the community of Pampallaqta, notes that every family in the *Parque* is now benefitting from the reintroduction of cleaned propagating material. Alejandro Argumedo, Executive Director of ANDES, takes a wider view, commenting that, “[s]ince we first began to repatriate our potatoes, our culture has come back. All the elders were happy about that” (as quoted in KOHA, 2011). For its part, CIP retains access to native, continually adapted cultivars for study, a vital (and now apparently legally and ethically redeemed) opportunity for a cutting-edge research institution. This, coupled with a ban on patents arising from the genelines, means that the *Agreement* does not impede non-exploitative and non-acquisitive research CIP undertakes with other centres and scientists (Bridges, 2005). The re-introduction and ongoing exchange of virus-free clonal stock is thus an *ayni* in another important way: it continues the Andean tradition of innovation through knowledge-sharing, expanding the paradigm to include the contemporary scientific and conservation communities (Andersen & Winge, 2008). Further, the *Agreement* is supporting the vitality of the traditional institution of seed exchange, as well as the quality and variety of propagating material available through these networks, since the *Parque* residents are distributing the repatriated stock to other Indigenous communities in the area (Argumedo, 2008). Scurrah *et al.* (2008) predict that even small, remote Quechua villages will see these varieties in their own *chakra* within the next decade.

Some of the earliest work in the *Parque de la Papa* was associated with the repatriation effort, either leading up to or in the wake of the drafting of the formal agreement with CIP. Greenhouses to shelter *papa* seedlings were among the earliest pieces of infrastructure built; while the first economic collective and the first formal Local Learning Group was the *Papas Arariwas*, proposed in 2001 to manage the reintroduction and maintenance of new propagating material, initiate dynamic

conservation projects, and strengthen traditional agro-adaptation practices (Argumedo, 2008; Dias & da Costa, 2008). The *Parque* seed repatriation and conservation centre, an adobe building housed in Paru Paru, was constructed to catalogue and store the incoming germplasm, in a collection that as of 2010 numbered 410 individual varieties (Murphy & Townsend, 2010). Recently, *arariwas* from the six communities participated in a major scientific conference on food security, taking a seat among more than 100 researchers from thirty countries who gathered in Qosqo to discuss ‘potato science,’ conservation and cultivation, global warming, adaptation of cultivars, access to markets, origin and dissemination, and biotechnology (CIP, 2008a). Working with scientists at CIP, *Parque arariwas* also identify species at risk, selecting certain varieties for protection and reproduction, and have taken the lead in joint efforts to selectively breed naturally climate-change-adapted and blight-resistant cultivars that may help other Indigenous and local agricultural communities within and outside of Perú (Argumedo & Stenner, 2008; Murphy & Townsend, 2010).

While the repatriation was the outcome of an internal desire to reassert rights over alienated biocultural heritage (Argumedo & Stenner, 2008), the communities’ request would have met with a very different response if not for a key shift in the international regime governing plant genetic resources and traditional knowledge (Dias & da Costa, 2008). In 2004, CGIAR banks of crop germplasm came under the legal umbrella of the FAO. Under the FAO Treaty – which took three controversy-riddled years to enter into force – breeders, farmers, and researchers are ostensibly equally able to access genebanks and share in the benefits arising from the use of the genetic materials they house (Rigolin, 2010). This right to a share in the commercial benefits of traditional knowledge, under standard conditions, was unprecedented vis-à-vis Indigenous and local farmers (Nijar, 2010). ANDES, recognizing this fact, employed the FAO Treaty, along with CBD Article 17.2 (on return of conservation-related information to Indigenous communities) in reinforcing the *Parque*’s appeal to CIP (ANDES, 2005). The same legislation was used to secure a binding promise from CIP not to patent any of the potato varieties covered by the *Agreement* (Swiderska, Argumendo, et al., 2006). This prevents transnational agro-corporations from both appropriating the germplasm, which certainly have commercial value, and subsequently selling locally-originated, outsider-patented seed back to the

communities (CIP, 2005; Dowie, 2008). Prior to these negotiations, CIP held exclusive rights over the germplasm; those claims legally reverted to the communities of the *Parque de la Papa* under the terms of the contract, making the *Agreement* a restitution of both Indigenous seed and Indigenous rights. The communities are now the sole party empowered to grant access to these particular cultivars, and permission must emanate from the *Parque's* council; while the contract also guarantees that the TK and innovations associated with the germplasm remain under local control (CIP, 2008b; Dias & da Costa, 2008). CIP's interest in forging a relationship with the *Parque de la Papa* was likely also motivated by the fact that since 2003 the CGIAR research agenda has been significantly broadened in order to attract new funding, and this enlargement triggered an unprecedented public relations focus across the allied institutes (Dias & da Costa, 2008).



Preparing greenhouses in Amaru for seedlings

The CIP-*Parque Agreement*, then, is certainly the first of its kind to be signed not only in Perú, but by a CGIAR institute anywhere in the world, which means it can be said to have created an important legal precedent for not only the fifteen member research institutes, but gene banks in general (Argumedo & Pimbert, 2005; CIP, 2005; Swiderska, Argumedo, et al., 2006). This is also the first instance of Indigenous communities partnering with non-Indigenous entities to conserve and develop a major global food crop (Nelson, 2008). Because this initiative brings together *in-situ* and *ex-situ* approaches in a dynamic conservation programme, the *Parque de la Papa* was quickly branded as a working example of continuity between culturally divergent (and often practically estranged) strategies and the potential for collaboration between them (Bridges, 2005). Legally, ANDES frames the *Agreement* as an example of ‘reverse access’ or ‘reversing the access paradigm,’ providing Quechua farmers access to alienated elements of their biocultural heritage (IPAFS, 2010). Further, the contract itself has become a case study for law schools in the region, featured in classes on environmental and human rights law (Argumedo & Stenner, 2008). As a result, and not without cause, ANDES asserts that the CIP-*Parque* contract stands as a positive example of the utility of appeals to international treaties in pursuit of Indigenous Peoples rights and aspirations. Dissemination of information on the contract and its negotiation could thus improve the bargaining position of other Indigenous communities by bolstering their own cases for access to alienated genetic heritage – genelines they often originally developed (Bridges, 2005). Alejandro Sutta Pacco, the head of the *Parque*’s governing body, points to the *Agreement*’s importance not only in the Occidental legal tradition, but in the ancestral Andean institution of *ayni*, which makes it a sacred and emotional, as well as a legal commitment between the two parties (CIP, 2011). From this perspective, the seed repatriation project constitutes the just conclusion of a Quechua exchange – a transaction suspended for fifty years – in which future access to CIP’s gene banks balances past access to the *Parque*’s *chakra*, restoring *rakinakuy* (Dias & da Costa, 2008; Swiderska, Argumendo, et al., 2006). The *Agreement for the Repatriation, Restoration and Monitoring of Native Potato Agro-Biodiversity and Related Community Knowledge Systems* was renewed in December 2010, in a traditional ceremony held at CIP headquarters in Lima, and remains in force today.



Papa arariwa in the conservation centre in Paru Paru (photo credit: Argumedo, 2010)

Participation in Multilateralism

The *Parque de la Papa*, its reputation as a successful *sui generis* regime for the protection of biodiversity and Indigenous knowledge solidified by the CIP partnership, has consistently attracted international attention, meriting several national and international awards (ANDES, 2005; Muller, 2009). Its methods and experiences have been presented to the World Intellectual Property Organization (WIPO) and the Parties to the CBD; as well as representatives of ANDES and the *Parque* being actively involved in human rights and conservation policy development at the Food and Agriculture Organization (FAO), World Parks Congress (WPC),⁶⁸ World Conservation Congress, UN Working Group on Indigenous Populations (UNWGIP), and World Conservation Union (IUCN) (Argumedo & Stenner, 2008). More specifically,

⁶⁸ In 2003 (at WIPO) and 2005 (at the WPC), representatives presented the results of a Rockefeller Foundation-funded research project on the viability of the *Parque's sui generis* protection system. This was one of the earliest Indigenous-authored studies demonstrating the insufficiency of law alone, without the inclusion of community-based and culturally relevant institutions, in the protection of traditional knowledge (Argumedo, 2008).

[t]he biocultural heritage concept, agro-biodiversity as a focus of conservation, the rights-based approach to development and conservation in indigenous communities, the incorporation of customary laws into management of a conservation area, the use of biocultural registers and the use of horizontal learning processes have all been recognised as models for other communities and are being reproduced by others in Perú and elsewhere in the world. (Argumedo & Stenner, 2008, p. 24)

Reversing this engagement, local Quechua community representatives are also actively involved in improving the effectiveness of the multilateral system at home, taking steps to promote legal and policy initiatives that make treaty promises a reality (for example, the UNDRIP, CBD Article 8(j), and farmers' rights under the FAO Treaty). ANDES' own organizational mandate includes Indigenous rights lobbying and political action at home and abroad, and its stated activity areas prioritize participation at local, regional, national, international, and global fora (Argumedo & Stenner, 2008). "It is possible," says the NGO's Executive Director, "in a globalized world to link local level action with international organization" (Argumedo & Pimbert, 2010, p. 348). In fact, it became a strategy of both the *Parque de la Papa* and ANDES to bypass an intractable state and hostile national institutional culture by seeking support on the inter- and supranational stage (Argumedo, 2008). This strategy has considerable actual and potential traction in conservation discourse and praxis, according to Greene, since,

images of the indigenous and spokespersons for sustainability do not merely circulate as symbolic currency. They also serve as political capital convertible into real-world opportunities. Indigenous rights are now closely entwined with the recognition that global measures for environmental conservation are needed to address the ills of a resource-hungry world economy. The worldwide move toward promoting ecologically sustainable development by international aid institutions increasingly broadens the forms of support indigenous groups receive along with their chances for establishing a successful political platform. (2005, p. 38)

Brysk (2000), along with Tobin and Taylor (2009), asserts that this assessment also holds true for Indigenous rights struggles, citing use of ILO-169, standing in the

Amazon Pact,⁶⁹ status at the United Nations, credibility with the World Bank, and clear ties to North American environmental organizations with providing Latin American Indigenous groups with some measure of influence or control at home. In 2008 in fact, ILO-169 provided a foil to state ambitions in the Amazon, levying the pressure necessary to force the Peruvian government to repeal executive orders affecting territorial rights (Tobin & Taylor, 2009). This points to an interesting, longer term, compound effect of Indigenous lobbying, and does provide evidence of ground being gained, since the drafting of ILO-169 itself marks a turn in the International Labour Organization's own approach. With this treaty, the ILO shifted from supporting assimilation of Indigenous Peoples into the wider society to a near-blanket endorsement of the recognition and protection of their inherent rights (Thornberry, 2002).

There has been a two-way flow of information in these fora: participants from the six communities and ANDES return with new ideas and renewed inspiration, while others take similar lessons away from presentations about the *Parque de la Papa* (Argumedo & Stenner, 2008). The value of this conduit for idea-generation and strategy-sharing should not be underestimated, since there are currently few successful models from which Indigenous communities can draw, either in terms of internally-oriented protection/conservation measures or externally-oriented tactics for linking the international policy framework to local understanding and action (Dulloo, et al., 2010). When the examples presented combine with the diverse sets of real-world experiences found among the members of the audience, the results favour the translation of familiar tactics into novel strategies. Thus the international arena is a source of inspiration and collaboration, infused with pragmatism, as activists seek out 'loopholes' on which to capitalize, learn about successful tactics and models, and join forces in opposing specific initiatives and discourses (Dias & da Costa, 2008; Shetty, 2005). Relatedly, the meetings are fertile ground for the nurturing of novel partnerships and the announcement of opportunities to participate in emerging international programmes; as well as a forum for parallel or 'shadow reports' on treaty compliance and case studies clarifying threats and challenges at the national level (Argumedo & Stenner, 2008).

⁶⁹ The Amazon Pact is a treaty governing industrial/commercial development of the Amazon River basin, signed in 1978 by Bolivia, Brazil, Colombia, Ecuador, Guyana, Perú, Suriname, and Venezuela.

For approximately the past thirty years, international legislation has consistently been used as a justification for claims made on the national front; while the United Nations has been routinely called upon, both rhetorically and legally, to ground local Indigenous struggles in global, ostensibly universal norms. In Perú, the impact of the CBD alone has been significant, spurring wide-ranging, vigorous debate on domestic policy instruments and legal provisions for the protection of Indigenous knowledge (Tobin & Taylor, 2009). In fact, the current Peruvian Constitution, drafted the same month as the country delivered its ratification of the CBD, included provisions on certain issues that would seem to indicate a concern for realizing promises made under the *Convention*. Muller (2009) goes so far as to claim that the CBD's entry into force marks a "‘before and after’ transition" in Peruvian agro-biodiversity-related legislating and policymaking, noting that national-level interest and initiatives increased apace after 1993, supposedly in direct response to specific treaty terms. In terms of ANDES work, including that within the *Parque de la Papa*, the organization has remarked on a correlation between national support for, and the international recognition of, its ideas and methods (Argumedo & Stenner, 2008). This is significant because tension between Quechua ambitions and projects and existing national legislation has tended to resolve in favour of Indigenous groups only when they merited, or seemed likely to merit, outside scrutiny. While some of the legislative ground subsequently gained has had a more rhetorical than practical impact, ANDES' approach remains that of using the politics of recognition to get laws on the books that can later be revised upward.

Drawing out the Lessons

Having examined in detail the specific concepts and strategies employed by ANDES and the *Parque de la Papa*, attention rightly turns to the substance and meaning of the flow between the conceptual and strategic frameworks – where it seems strongest, where it would appear to falter, and where it is still being negotiated – as well as the wider significance of these positive and negative flows.

Pernicious Hazards & Persistent Hurdles

Life as Industry

In many ways, the terms of the relationship between the *Parque de la Papa* and the *El Centro Internacional de la Papa* were set when the research institute first appropriated native tubers from the communities' *chakra* some fifty years ago. CIP's rise to prominence is, in fact, predicated on those 'collections,' along with similar appropriations throughout Latin America, which the permissive political attitude of that time does not ethically expunge – but recent, 'groundbreaking' repatriation initiatives just might, at least from the perspectives of civil society and the academic and applied research communities. Even setting aside the possibility of an egoistic motivation for the *Agreement for the Repatriation, Restoration and Monitoring of Native Potato Agro-Biodiversity and Related Community Knowledge Systems*, no organization could better represent the antithesis of Quechua principles, as encoded in the mandate, strategies, and aims of ANDES and the *Parque de la Papa*. Unfortunately, with only a fraction of 0.01% of gross domestic product funding research in both agriculture and conservation, Perú's financial neglect ends up playing matchmaker to precisely these kinds of cross-cultural partnerships between Indigenous farming communities and international institutes anxious to access their knowledge, innovations, and territories (Muller, 2006).

Green Revolution, Gene Revolution

Institutionally, CIP's heritage lies in the Green Revolution, with the Ford and Rockefeller foundations largely underwriting the advent of the Consultative Group on International Agricultural Research. The centres under the CGIAR's umbrella were founded in order to develop and disseminate agricultural extension technologies based on the American industrial farming model (Dias & da Costa, 2008; GRAIN, 2000). This meta-project was intended to stop the spread of Soviet-style central planning (ostensibly motivated by the perceived disinclination of capitalist states to redistribute food and support small farmers); develop new markets for US exports, including both food products and the inputs and technologies to grow them in an American 'style;' and found *ex-situ*, centrally controlled banks of U.S. staple crops. Simply put: CIP was created to implement this agenda for the potato (GRAIN, 2000). Though its pool of donors has expanded from its original five to more than forty in recent years, it also receives funding through the CGIAR, meaning that the *Centro Internacional de la Papa* is bankrolled by centralized disbursements from over sixty states, private foundations, and large-scale organizations (including biotech giant Syngenta⁷⁰) (CGIAR, 2007/2008; Dias & da Costa, 2008). This financial scaffolding is the culmination of a significant shift in CGIAR's funding, from entirely public to increasingly private, which is now provided by a mixture of state and corporate sponsors who disproportionately represent not merely the wealthiest industrialized countries, but a subset (only four) of them. The CGIAR itself is headquartered in the U.S. capital, at the World Bank, and sets the overall agenda and budget for its constituent research institutes. The fact that the organization is funded by governments is highly controversial, particularly since the CGIAR, by virtue of its reputation and influence, affects (or justifies) national agricultural development policies worldwide. This concern is compounded by an awareness that larger and larger portions of available project funding are being made conditional upon the 'participation' of specific donor-country organizations and/or researchers, and that the CGIAR is the organization through which the bulk of all financing for international agricultural

⁷⁰ Syngenta, it is worth noting, is responsible for a new terminator-like technology highly relevant to the Andean agricultural context, in which tubers will not sprout unless a certain chemical (patented by Syngenta) is applied. For this innovation, Syngenta was granted US patent 6,700,039 in March of 2004 (Newswire Today, 2007).

research, undertaken anywhere on Earth, is funnelled (Ortiz et al., 2008). There is therefore just cause to seriously consider Sharma's claim that CGIAR is today an "agricultural research outsource for the multinational corporations" (2004).



Papa plants undergoing greenhouse-based adaptation, part of the participatory plant breeding programme undertaken with CIP

For most agricultural research and extension organizations, the agenda of the Green Revolution segued seamlessly into that of the Gene Revolution (Shiva, 1997). This was no less the case with the CGIAR institutes. Despite trenchant and ongoing critiques of both agricultural paradigms, Green and Gene Revolution praxes continue to dominate the world food system. As a result, promises that genelines warehoused by CIP are being held 'in trust' for all humankind must be viewed with great caution. In 2000, WIPO and the US Patent Office granted American food processing corporation

Appropriate⁷¹ Engineering and Manufacturing's application for a hybrid of nine Andean *nuña* beans housed in the genebanks of the International Centre for Tropical Agriculture (CIAT), a CGIAR research institute and sister organization to CIP. Destined to be a snack food, it is the well-known and Indigenous farmer-bred characteristic of all *nuña* – that they ‘pop’ when roasted – that is predicted to appeal to American consumers. Further, this was not even the first patent the ‘inventors’ of the *nuña* hybrid obtained from Indigenous germplasm housed with CGIAR. An earlier, 1996 patent on a hybrid of a West African cowpea was developed by Jeffrey Ehlers while he was actually employed as a researcher by Nigeria's International Institute for Tropical Agriculture, a CGIAR member (RAFI, 2000). Moreover, CGIAR's Material Transfer Agreements (MTAs, contracts preventing users from claiming property rights over any of the genetic material accessed) actually allow commercial developers to use catalogued Indigenous germplasm to develop patentable products while simultaneously overriding the public and private sector's obligations under the *Convention on Biological Diversity* (GRAIN, 2000). For this reason, GRAIN (2000) refers to CIP as providing corporations with “a shortcut to access potato diversity.”

The CGIAR institutes also undertake their own research intended for widespread dissemination that, although never patented, has the potential to cause immediate and widespread harm to Indigenous agro-ecosystems. Earlier this year, CIP itself bred a sterile (i.e. GMO ‘terminator’) potato with resistance to the crop-devastating Andean tuber moth (*Phthorimaea operculella*) (Crop Biotech Update, 2011). Considering the close association of women and seed in Quechua thought, CIP's involvement in genetic use restriction technology disturbingly echoes the compulsive sterilization of over 200,000 Indigenous women in Perú between 1996 and 2000 (BBC News, 2002), as another eugenic project targeting the Indigenous Andean. Further, GRAIN (2000) describes the *Centro Internacional de la Papa* as making “huge investments [...] in genetic engineering,” a project necessarily at odds with biodiversity itself and which, in the long run, will weaken the resistance to pests and diseases conferred by the rich genetic variation in the *altiplano* – placing Indigenous farmers in an even more

⁷¹ It is unclear whether this word (having two distinct meanings, either of which could be said to apply) is meant to turn the name of the company into a rather ironic pun.

precarious position. Moreover, the high cost of genetic research means that it cannot be undertaken without corporate backing, while the tied funding provided to CGIAR by corporations and agro-industry groups means that these private, for-profit entities exert considerable control over the research agenda and reap the bulk of benefits ostensibly intended to accrue to farmers and consumers (GRAIN, 2000). This contamination risk goes beyond financing, and in doing so actually violates CIP's core mandate:

Dependency on technologies patented by corporations has already resulted in confidentiality agreements prohibiting it from presenting information in public fora, which is anathema to CIP's self-appointed role as the purveyor of agricultural technologies and knowledge. By accepting patents on transgenic plants and genes, CIP is not only relinquishing its traditional vocation of ensuring the free flow of farmer germplasm and scientific knowledge: it is also sending a strong message to the countries where it is promoting potato production to do the same. (GRAIN, 2000)



Potato storage at CIP (photo credit: Fowler, 2009); compare with the equivalent storage facility and potato scientist(s) in the Parque (page 113)

Under the terms of the *Agreement* with CIP, the residents and representatives of Sacaca, Chawaytire, Pampallacta, Paru Paru, Amaru, and Cuyo Grande are also obliged to maintain confidentiality about current research being done at CGIAR, even when that

research involves the repatriated varieties belonging to the *Parque* itself (Bridges, 2005).⁷²

Failings of Reciprocity & Strategy

The presence of any substantive or lasting institutional interest in Indigenous cultures and practices, on the part of CIP or any other CGIAR institute, is also questionable. At the very same time that CIP was negotiating with ANDES, its Mexican sister-agency (the *Centro Internacional de Mejoramiento de Maíz y Trigo*, CIMMYT) was ignoring Indigenous farming communities' requests to weigh in on the GMO-contamination of native maize. In that case, *campesinos* and civil society organizations merely asked CGIAR to address statements from the Mexican Environment Ministry that in two or more regions, fields had been contaminated by transgenic crops imported from the U.S. and Canada (IPS, 2004). The Consultative Group on International Agricultural Research also declined to address Indigenous farmers' concerns that future access to GMO-free maize, housed in CIMMYT genebanks, had been compromised. Dr. Alejandro Nadal, Director the Colegio de Mexico's Science and Technology Programme concluded that, "CGIAR has failed to take responsibility by ignoring that genetic contamination will eventually make it very difficult or impossible to rejuvenate their seed stock. By not calling for a moratorium to stop the sources of contamination in Mexico, and by failing to take steps to protect all centres of crop diversity, CGIAR is contradicting the precautionary principle" (as cited in ETC, 2002, p. 2). The group's own NGO Committee (2002) subsequently released a statement condemning its lack of support general inaction, further noting that the organization has:

[f]ailed to initiate scientific work to assess the risks and biosafety requirements necessary to protect the genetic integrity of landraces on-farm, their ownership and the livelihoods of resource-poor farmers [...]. [The CGIAR and its Centres have also] [a]ctively been promoting genetic engineering technologies and products, which are incompatible with farmer-led agroecological research, and will lead to further

⁷² CIP's research here includes agro-morphological and molecular characterization, evaluation for nutraceuticals, logging of gene markers, seed selection and conservation, investigation of genetic erosion and factors of native potato production, and ongoing inquiry into crop wild relatives.

marginalisation of farming communities. The CGIAR and some Centres have been promoting biotechnology as the answer to world hunger.

Establishing closer ties between all of the world's tuber genebanks is one of CIP's key undertakings, and has been for the last several years, with the ultimate goal of keeping these genelines in the public domain (and hence freely available and safe from privatization) (GRAIN, 2000). However worthy a goal this may be, it amounts to an attempt to correct an ethical defect at the very core of the intellectual property rights regime (theft, and perhaps even inducements to theft) by actually making it easier to misappropriate knowledge through cataloguing it in an open-access environment (essentially, making convenient, searchable lists of theft-worthy goods). And while public domain materials and knowledge cannot be patented, any part of any of the genelines housed at CIP can be vector-inserted into other propagating material and the results⁷³ owned outright (TWN, 2010). This is why a United Nations University Institute of Advanced Studies report concluded that the public domain principle, when applied to traditional knowledge, yielded significant inequities for Indigenous Peoples (UNU-IAS, 2004). The fact that the germplasm of the *Parque de la Papa* is already archived with CIP, along with the recent transfer of the entire genebank to the Global Seed Vault at Svalbard, makes this finding directly relevant to the work of ANDES and the Quechua agricultural communities it represents.⁷⁴ Bannister and Hardison deepen this critique by pointing out the other key problem with public domain inclusion of Indigenous biocultural heritage: that it “diminish[es] the context in which the knowledge evolved (and therefore the sense of responsibility to source communities),” adding that, “[a]s seen over the last two decades of intensive literature-based biodiversity prospecting, all too often third parties from the commercial sector (e.g., biotechnology, pharma, herbal,

⁷³ Note that more than the final plant material may be patented, since the vector (the genetically modified host, for example, a bacterium) that delivers the CIP-derived gene is itself an ‘innovation’ (TWN, 2010).

⁷⁴ Several academics assert that using databases and registers for the protection of Indigenous knowledge is problematic in the absence of binding legislation specifically recognizing rights over that data. The absence of such laws means that information placed in registers or databases could well be considered part of the public domain (in which case rights *cannot* attach) (Hardison, 2005; Tobin, n.d.). In Perú specifically, existing traditional knowledge legislation does not allow for the recognition of registers in national-level proceedings (Tobin & Taylor, 2009).

floral) lack sufficient awareness or incentive to address the inequities and potential harms to source communities and ecosystems of such enterprises” (2006, p. 6).

The first ambition of the Green Revolution – bringing subsistence and solidarity economies under the monetized, capitalist market – has always amounted to a perverse idea perversely executed. Small shifts in the discourse and practice of international aid and development (for example, micro-credit) do little if anything to address the fundamental incompatibility between disparate visions of how best to structure human productivity and exchange. Unfortunately, CIP is a product of its parentage in this regard, since its perspective on the repatriation is focused as much on market-based solutions to farmers’ problems as it is on supporting cultural maintenance activities and *in-situ*/dynamic conservation of crop genetic diversity. CIP is one of the architects of the Peruvian initiative to identify and exploit market niches for Andean tubers, for example. Its ambition here is to ‘introduce’ native potatoes and native farmers to the ‘modern commercial circuit,’ and to grow both a local demand and an export market in Andean *papa* (GRAIN, 2000). The ‘fit’ between Quechua and market values has thus far avoided critical treatment in the literature, or in the process of strategizing. Fernandez, writing about the larger attempt to ‘develop’ the *ayllu* via market mechanisms, asserts that, “[w]e reject [...] the imperialist efforts to transform all the human inhabitants of the Andes into entrepreneurs – be they large, medium, small, or micro – to link us to the world market: that impersonal and cruel environment in which we refuse to participate” (1998b, p. 235). GRAIN (2000), taking a more dispassionate approach, points to the flaws in basing a key tactic on an ill-founded hypothesis, since supplying export markets almost invariably fails to aid small farmers or local agricultural communities anywhere, never mind in the “neoliberal cyst” of Perú (Misoczky, 2010, p. 10). On the domestic front, there is reason to doubt that a regional or national market in Andean *papa* can be made to yield much benefit for Indigenous farmers. Factors mitigating against success include the skewing of incomes in Perú (where the richest 10% of the population commands almost 40% of the nation’s wealth); the fact that the majority of its citizens simply cannot afford to buy premium goods (average income standing at \$4,200 US/annum); and the realization that *papa* are income inelastic (in other words, no matter how rich one becomes, one will only consume so many of them), which means that even rising incomes may not fuel a

significant increase in demand (World Bank, 2011). Campaigns to increase domestic consumption do not touch the issues underlying the fact that in the centre of origin of the *papa*, potato consumption is half what it is in Europe (Collyns, 2008) – including the market implications of a recent free trade deal motivated by what Espinoza (2009) has called the Peruvian state’s “submissive ‘yes or yes’ policy towards the US.”



*Paqo performing a ceremony to send cultivars to the Global Seed Vault at Svalbard;
On the mats are kuka, aqha, and papa*

If the ethical suitability and economic penetrability of market-driven initiatives remain unproven, what has been well established is the fact that ordinarily subsistence farmers forced into the market economy tend to grow crops with higher commercial value in over-abundance, or even exclusively, since there are considerable economic disincentives to agro-biodiversity conservation for its own sake (Mburu & Wale, 2006). Moreover, if Marx reminds the reader that commodification conceals the social nature of exchange and consumption, Andean Indigenous Peoples draw his attention to the fact that commodification of *papa* and *Pachamama* is more than an act of concealment; it is a form of enslavement (Grey & Patel, forthcoming). The anonymity of the commodity means that it cannot be located anywhere in the concentric circles of kinship that define

Andean existence, and which bind *Runakuna* and *tirakuna* within the *pacha* they share. Ultimately, marketization serves capitalist development much more effectively than it does any other potential beneficiary, imposing goals, standards, and methods well outside of Andean frames. In this clash of cosmologies between Indigenous and capitalist, it is the nation-state that stands ready to claim the spoils.

Donor Culture & 'The *Munayniyoq* Order'

The neoliberal reforms of the 1980s and 1990s that decentralized developing country governments, shunting social services to the margins of national budgets, had two key impacts on programme activity in Indigenous communities: the simultaneous retreat of the state and the proliferation of non-governmental organizations (Dias & da Costa, 2008).⁷⁵ Approximately nine hundred NGOs were registered in Perú between 1970 and 1992, more than six times the number that existed prior (Oliart, 2008). They were not a new phenomenon even before 1970, of course, since non-governmental entities have been active in Indigenous communities for generations, initially as Settler-peopled philanthropic organizations and, increasingly in the 20th century, as Indigenous-led bodies. They are, however, more numerous, connected, and entrenched now than ever before, and yet continue to benefit from the under-examined public-private dichotomy that lends them an ill-deserved anti- (rather than merely non-) state character. Nongovernmental organizations, without question, provide Indigenous communities with skills development; technical assistance; and a shield or leverage (or both) against third parties, particularly state and corporate actors (Greene, 2004). But they are also bureaucratic institutions with their own political and economic agendas and exigencies, whose 'disciplinary power' has drawn scholarly attention for some time (García & Lucero, 2007). NGO gatekeeping for Indigenous communities is not without problems, many of them with significant actual and potential fallout, whether or not those NGOs are staffed by Indigenous persons.

⁷⁵ Varese (2010) extends this span an additional twenty years, speaking about Latin American in particular.

Nongovernmental Governmentality

Funding (or rather, reliance on funding) immediately skews a donor-NGO ‘partnership,’ since donors are absolutely asset-heavy outsiders whose essential financial contribution literally buys them a say in what projects are undertaken, what methods are employed, what results are published (and when), and how information is presented. Even granting perfectly philanthropic donor motivations and methods, in programme planning, monitoring, and evaluation it can become exceedingly difficult to differentiate ‘outsider’ and community interests where there is strong motivation to harmonize the two; while ideological entanglement is unavoidable where ambitions neither perfectly overlap nor cleanly diverge. Further, since all ‘harmonization’ implies compromise – which, admittedly, is far from a negative relational activity in itself – it is inevitable that communities’ aspirations and demands will be steered into areas more legible and less threatening to funding organizations. Since donors advocating rights-based approaches tend to assume a normative rather than political posture in their work, the net effect of this compromise is a blunting of the political stands, statements, and objectives of NGOs, and therefore of the communities they represent. Exacerbating the general trend toward politically ‘safe’ issues is the fact that donor cultures fluctuate, sometimes wildly, so that funding priorities shift at multiple levels of the financial hierarchy, from field offices of smaller charities to the headquarters of the international financial institutions (Eyben, 2005). The ephemeral nature of relationships built with these organizations thus mitigates against both exhibiting a contentious agenda at the outset, and the possibility of developing a progressively radical set of in-community programmes. At home, the fact that NGOs operating in Perú must now register with the state agency overseeing international cooperation (Argumedo & Stenner, 2008), means that an apolitical agenda may become a necessity for the very survival of organizations like ANDES, wiping out projects with the most ambitious aims vis-à-vis Indigenous decolonization. Looking abroad, a saturation effect and the drive to ‘sell’ projects and partners further estranges the intent of local communities and the impact of partner organizations, since as Brysk observes, “[a]ll of the major advocacy groups publish and lobby on indigenous issues, but their efforts tend to reach a narrow sector already sympathetic to native issues.

Furthermore, even some activists believe that these appeals are based too heavily on guilt and exoticism and too little on solidarity” (2000, p. 297).

The issue of ‘legibility’ has equally important fallout. When ANDES lists their assessment indicators⁷⁶ (measures used to evaluate their success or failure in a given activity), that list is linguistically and cognitively oriented toward current and future funders, for example discussing the “transform[ation of] assets (natural, physical, financial, human, social, cultural) into livelihoods” (ANDES & IIED, 2005 cited in Pimbert, 2006b, pp. 3-4); or the harnessing of ‘ecosystem goods and services’ and the establishment of ‘economic incentives’ for communities to protect *Pachamama* (Argumedo, 2008). This situation could not be otherwise, since ‘donor-speak’ is one of the demands of the funding-dependent environment in which all NGOs operate, but it remains that such fundamentally outward-looking, developmental, arguably economistic terminologies and methodologies are deeply concerning. One of the most immediate practical effects of adopting this vernacular has been ANDES’ overwhelming reliance on non-Indigenous and foreign volunteer staff to satisfy the roster of Occidental analytic and writing skills required for the drafting of ‘acceptable’ donor-destined documents, instead of those Indigenous staff and community members who actually carried out projects (Argumedo & Stenner, 2008). This may be a factor in ANDES’ failure to meet its goal of phasing out much of its direct support to the *Parque de la Papa* by 2007 (ANDES, 2005), leaving the communities in a position of ongoing dependency.

The conceptual fallout of a techno-bureaucratic operating language is more difficult to trace, but an attempt to do so certainly calls for consideration of the fact that, as Gonzales *et al.* point out, “through language we express our view of the world *and shape it.*” (2010, pp. 172-173, emphasis added). Similarly, international support comes with ideas and expectations that can and do change the shape of the activity proposed (Andolina, 2001), as well as timelines that warp the pace of activity in and around the ‘beneficiary’ communities (Argumedo & Stenner, 2008). Spending the donors’ money,

⁷⁶ ANDES’ 2008 report lists the following indicators/outcomes used to measure programme success: “local or international workshops organised and attended, individuals trained in a specific skill, research results published, increased community awareness of international agreements affecting indigenous rights, governance structures set up and operating, and products sold by an indigenous economic collective” (Argumedo & Stenner, 2008, p. 21).

and reporting on these disbursements, become prominent duties attached to funding, so that there can be (and often is) a literal scramble to divest the organization of funds before missed deadlines see it rescinded. Ironically, a sizeable portion of funding must be devoted to tracking the moneys granted, and again performance of this task favours a skill set not generally found in the households and *chakra* of Sacaca, Chawaytire, Pampallacta, Paru Paru, Amaru, and Cuyo Grande. And finally, the fact that the number of Indigenous organizations in operation has increased dramatically in recent years means that competition for already scarce funds has increased significantly, so that high-profile proposals – which are not always, or even very often the most successful – gain greater attention, squeezing out smaller, community-based initiatives (García & Lucero, 2007; Oliart, 2008).

Money Chasing Money

Because the *Parque de la Papa* was a leading example of an emergent phenomenon, and since ANDES structured its work to include existing programme elements in novel ways, representatives of the NGO have become frequent invitees to global conservation, Indigenous rights, and traditional knowledge fora. This has allowed past successes and future ambitions to be broadcast to a comparatively sympathetic audience, of which donor organizations are a regular part. Subsequent project and research funding, ANDES asserts, was a direct result of this initial international visibility (Argumedo & Stenner, 2008). Once on this track, though, ANDES found itself participating in international and global events on the basis of past funding, in order to secure future funding, with a significant portion of its operating budget devoted to international travel and conference fees.⁷⁷ This position skirts making funding the object of funding – an odd tautology, though it does conform to the theory that self-preservation is a key goal of any bureaucratic organization (Weber, 1922/2002). A major benefit of its increasingly global-level participation has been ANDES' chance to develop projects cooperatively with donors, based on built reputations and ongoing interactions at these

⁷⁷ In 2005, for example, a third of ANDES' operating budget was devoted to travel expenses (Argumedo & Stenner, 2008).

large meetings, instead of having to send anonymous proposals to charities and funding bodies.

The flip-side of this benefit is the tremendous price – in terms of both financial outlays and opportunity costs⁷⁸ – of active involvement in what Friedman (1999) calls the ‘global cocktail circuit.’ This price remains under-examined in ANDES’ self-assessments. Admittedly, international venues also act as information-gathering sites, and a desire to stay abreast of emerging developments in international law and policy is one of ANDES primary motivations for participation. Here, though, is where opportunity cost becomes an urgent concern: time away may be well invested, but it perfectly displaces time spent in community, or even in-country. This is especially troublesome since, owing to the demands of participation in these fora, the most educated persons within a community or organization are typically the ones in attendance, and this subset tends to map onto the existing leadership of nongovernmental organizations. These individuals thus become more than NGO workers – they become spokespeople-cum-gatekeepers, charged with articulating select information emanating from the community, while simultaneously filtering the ideas and data flowing inward. Such representatives may or may not be elected by the community itself; more often they are forum-, donor- or even self-selected, or else the rarity of their skill-set makes them the obvious (or only) candidates. When these persons become indispensable to the organization’s operation, a minor variant of the ‘iron law of oligarchy’ becomes at least a background concern (Michels, 1911/2001). It follows, logically, that hierarchies of participation create hierarchies of experience, skill, and understanding, so that inequalities multiply and overlap, and privilege becomes self-perpetuating and relatively invulnerable to change or challenge. The issue is further muddied when the most prominent staff members’ entire salaries are paid through the contributions of a single donor, as is the case with ANDES.

⁷⁸ ‘Opportunity cost’ refers to the cost of the alternative forgone when a given course of action is decided upon and pursued.

Political Acculturation

Brysk writes that NGOs' "ambivalent dependency" on indigenist sectors (domestic, foreign, or global) has the tendency to reduce their accountability to local communities (2000, p. 296), and indeed it seems inevitable that a movement will depart from local contexts and tangible relationships as it moves upscale and upstream. It is this development, the emergence of a new class of comparatively community-estranged, professional and/or academic Indigenous representatives, that is perhaps the most worrisome. For Quechua this should be especially concerning, since as Stadel notes, "[i]f it happens that a person does not belong to the local community anymore, the individual is isolated and lost" (Stadel, 2001), with consequences impacting both the émigré and his *ayllu* of origin.

A history of colonialism has seen non-Indigenous will prevail in the Andes, while Peruvian political custom has allowed promise-making to continue in the absence of promised changes actually materializing (de la Cadena, 2008a). This pattern has not been restricted to mainstream politics, though; instead, it increasingly trails over into Indigenous organizing, where the near-arbitrary structuring of opportunities separates out and empowers some individuals over others. As a result, in Perú there is a palpable difference between the literate (usually bi- or trilingual) Indigenous activist community, centred in and around urban NGOs and other Occidental-styled organizations, and the frequently illiterate (and monolingual) Andean communities they represent (García, 2003; Greene, 2004). Despite the fact that appeals to Indigeneity as a characteristic passively inherited are exceedingly common, the label 'Indigenous activist-intellectual,' as Field points out, "does not connote that either genealogically or culturally marked Indianness naturally endows [one] with the capacity to represent the ideas and interests of indigenous peoples" (1996, p. 137). In terms of institutional character, despite claims of the existence of truly hybrid structures and processes, it remains to be seen whether any bureaucracy can be substantively 'Indigenized.'

Within Indigenous communities in Perú today, both urban and rural, particular individuals find themselves with greater-than-average access to legal, educational, religious, and commercial institutions – and tending to articulate and exercise this access as an individual right (de la Cadena, 2008a). Unfortunately, the activist-intellectual and

rural community worlds connote very different lived realities, and the distance between the two can be difficult to cross, both conceptually and literally (García, 2003). When a lack of awareness of their comparative ‘luck’ couples with an uncritical belief in the genetic basis of an Indigenous morality, these activist-intellectuals can become *munayniyoq*, a Quechua term that roughly translates as ‘those who listen to no reason but their own.’ Such name-granting, in itself, constitutes a serious critique of what de la Cadena refers to as Perú’s “*munayniyoq* order of politics” (2008a, p. 343), an order that more and more describes Peruvian private-sector aid, political agitation and lobbying, and development activity. As a parent and community leader in Rumipampa notes, “[activists] think we are stupid. They talk to us as if we were dumb. [...] They have given us no results. And we live this reality. They are outsiders” (as cited in García, 2003, p. 83). Salomon is referencing this same phenomenon when he describes how, “[a]ctivists have learned from experience that leadership in indigenous movements must be closely linked to credentials of leadership in home communities, lest the organization fall into the hands of people whose native habitat is the meeting hall” (1982, p. 71). Considering that donor culture aggressively promotes the nativization of the ‘meeting hall habitat,’ ANDES will have to be vigilant about the extent to which the *munayniyoq* culture inflects its own.

Catching the ‘Sickness,’ Rejecting the ‘Cure’

The website of the *Parque de la Papa* is anchored by the phrase, used as banner text, “we are six but now we are one” (PdIP, 2011). Unfortunately, the ‘six’ has recently become ‘five,’ since the community of Cuyo Grande separated from the confederation in 2011. Cuyo Grande is the largest, wealthiest, and one of the most centrally located of the *Parque*’s constituent villages, and accordingly boasts the most developed infrastructure. It is often a first or second stop for tourists entering the valley proper – and if those tourists come to see the Inkaic site of Pukara Puntilljilla or the communities’ colonial-era edifices, or if they are looking for the travelogue-worthy views of the Urubamba Valley or the famous *andenés* of Písaq, it could well be their only stop inside the *Parque*. Unfortunately, withdrawal of membership in the Association of the Communities of the

Potato Park means that Cuyo Grande can continue to benefit from the advertising of the *Parque* as a single destination, without having to make contributions to the communal fund that pays for that publicity. Further, since the Association's fund for benefit sharing is primarily used to pool and level the disparate incomes of the six communities, redistributing wealth, as the largest contributor Cuyo Grande increases its savings by withholding moneys that do not directly benefit its own residents. Thus from a pragmatic, value-neutral perspective the choice to leave the confederation makes a certain amount of economic sense – yet even viewing this choice through a non-Quechua lens, it is undeniably opportunistic and predatory. Poorer residents of Cuyo Grande directly benefitted from the *Parque*'s benefit sharing system, meaning that the 'savings' derived from withdrawal only accrue to the village's wealthier households. The families most directly affected have protested the decision, and even lobbied for some form of re-incorporation in the body of the wider collective, without finding an audience. The institutions of governance operating inside the *Parque de la Papa*, based on *varayoc* and *karguyoc*, no longer have jurisdiction, and state law can be called upon to halt any 'interference' from these traditional authorities in Cuyo Grande's internal affairs.

The *Parque* has thus become another kind of example: living proof that the historical trajectory of globalization truly is marked by the simultaneous expansion of capitalist social relations and contraction of notions of community (Engels, 1942/2002). The behaviours that have cultural limits in traditional societies, backed by social sanction, are unleashed by the 'negative freedoms' inherent to capitalist systems. Reframing the passive violence of neglect as a form of 'liberty' – freedom from the obligation to help others – is a prime tenet of market-oriented societies. Inequality as acceptable or even macroeconomically beneficial, and individualistic competitiveness as a necessity given the natural state of resources as scarce, are good candidates for the second and third tenets. Fernandez, spotting the irony at the heart of this 'liberation,' notes that in liberal economic theory, "[t]he individual is the real support of a society that ignores him" (1998b, p. 194). Even the free-rider effect seen in the case of Cuyo Grande, which is a clear threat to the optimal functioning of markets, is treated as little more than an unfortunate (and uncontrollable) fact by mainstream society.

From a Quechua perspective, the choice of Cuyo Grande to abandon the *Parque de la Papa* violates every principle of Andean ethics, damages the fabric of the Andean community, and attacks the authority of Andean customary law. The *ayllu* does not tolerate, and in the contemporary context cannot withstand, the resource and reciprocity asymmetries that are both a cause and a consequence of the village's newfound independence. In fact, egoistic, calculating behaviour is part of a Quechua medical diagnosis, as *paqo* treat colonialism as an *onqoy*, (sickness):

Colonialism is understood as a strange subject with agency and it is treated as such in ritual curing practice [...] Colonialism is not only understood as a [...] strange illness inflicting the [...] body, world and spirit, but also as encompassing a strange state of worry, stress, fear, envy, individualism and negligence of native spirits in the landscape. This strange state not only aggravates illnesses; it causes new illnesses to emerge. In other words, Colonialism is on the one hand considered a sickness and on the other hand the source of sickness. Most notions of illness held by [...] shamans find their equivalents in notions of Colonialism. Three of those correspondences [...] are notions of loss, imposition, and incompleteness. (Burman, 2009, p. 120)

The cure for this disease, *paqo* assert, is decolonization. This realization brings little relief, though, since in the case at hand the decolonization project – the reinvigoration of the *ayllu* through the establishment and nurture of the *Parque de la Papa* – failed to provide prophylaxis, while in separating from the confederation, Cuyo Grande foreclosed its own access to the best available treatment. The result is that the residents become what Scott (2004) calls ‘conscripts of modernity’ and Fernandez refers to as ‘colonized-colonizers’ of the Andes, “the agents of colonization among us” (1998a, p. 124). Being Andean and Indigenous himself, Fernandez describes the turn away from the wider *ayllu* as its own, alternative relationality, since “[c]olonization is a form of bond, a form of union, and thus it is not and cannot be unilateral; it is necessary that the colonized voluntarily give up their intimacy to the colonizer. The colonizer and the colonized are complimentary” (1998a, p. 124).

The *Parque de la Papa* as a whole, and the individual members of its remaining five communities, also find themselves harmed by this turn. At the interpersonal level, the residents of the other five communities must watch their former *ayllu masi* struggle

and suffer against an unresponsive, unrepresentative leadership. They have now seen repeated what they already understood prior to the confederation of the six villages: that, as Mamdani (2001) noted in Africa, the inversion of colonialism is not a departure, and a Native-helmed, Settler-designed system is only nominally Indigenous. At the level of the group, the withdrawal of Cuyo Grande presents a strong challenge to the institutions of customary law that ANDES and the *Parque* have worked hard to reconstitute internally and extend externally. Calls for legal pluralism and the recognition of *derecho consuetudinario* in non-Indigenous jurisdictions are certainly weakened by a concrete demonstration that customary law has limited validity even in its home context. A similar weakening occurs vis-à-vis assertions of mixed and reciprocity-based economies as a bulwark against “capitalist ethnocide” in Latin America (Espinoza, 2009). Ultimately, the abandonment of the other five communities by Cuyo Grande undermines decolonization itself, by seeding the idea that it is not a *conscious choice* Indigenous people make (a rejection of colonialism as process and project), but instead a function of their *lack of choice* (an emotional reaction to the inability to ‘make it’ in post-colonial society). When presented with decolonization via the resurrected *ayllu* or self-colonization via market individualism, the ‘successful’ in Cuyo Grande emphatically voted for the latter.

Ontological Incongruence & the ‘Coloniality of Power’

The Quechua have a long history of using state law – in fact, in the wake of the invasion of Tawantinsuyu, overtures to the Settlers’ own legislation became a leading strategy of Inkaic groups challenging colonialism (Drzewieniecki, 1995; Stern, 1982). Whether the contemporary iterations of this strategy constitute confrontation or conciliation, though, is debatable. Luckily, on the ground, the state has proven itself incapable of extending its monopoly over justice into the Peruvian highlands (in fact, whether it ever enjoyed such a monopoly even in the lowlands, beyond the *costa* immediately surrounding the capital, is arguable), with one end result being the perpetuation of *derecho consuetudinario*, with varying degrees of integrity, in the *altiplano*.

Challenge or Concession?

Over centuries of legal appeal, the wide oscillations of Peruvian political culture have inculcated a kind of Indigenous advocacy-opportunism, as groups race to identify the opening and closing of exploitable loopholes in the state legal system. The result has been a strong inclination to get decidedly imperfect laws on the books in the hope that these footholds will persist, and that they can be widened and stabilized at a later date. This has been ANDES', and by extension the *Parque*'s, principal domestic legal strategy. Drzewieniecki (1995) and Kellogg (1992) both assert that such tactics have helped to steer and contain the will of the state and local elites, while Tobin and Taylor (2009) credit them with catalyzing critical debate. Debate, however, has never taken place openly in the legislature prior to the passing of Indigenous rights and knowledge laws – as Tobin and Taylor (2009) themselves admit – nor has it been ‘full and informed,’ incorporating members of the groups directly affected. ANDES, for its part, sees a victory in the rising levels of community awareness of legislation, which empowers Indigenous Peoples to claim their citizenship rights, along with the fact that Indigenous lobbying has had some effect on the actual development and implementation of state law (Argumedo & Stenner, 2008). This optimism, though, should be tempered with cognizance of what Quijano refers to as the ‘coloniality of power’ in Latin America, the “racialized hierarchical operations of everyday life” (2000, p. 535). This coloniality serves to retard not only the ‘sensitization’ of the legislature, but also engenders a lack of any desire, on the part of its members, to *be* sensitized. Actors attempting to push progressive legislation have had opted to utilize this coloniality rather than seek to overwhelm it – ANDES included. For example, oft-lauded laws protecting native food crops have been passed through appeals to Peruvians’ sense of pride in “the natural things Peru *owns*” (Muller, 2009, pp. ix-x, emphasis added), a strategy that, whatever else it may have accomplished, has certainly reinforced non-Indigenous prerogative and privilege. Legally shielding ‘possessing’ is in no way coincident with expanding understanding of the inherent value of the land, and it will neither produce new nor reinforce existing systems that operationalize that value. Further, the vital relationship between *Runakuna* and *tirakuna* – a relationship constitutive of Indigeneity in the Andes – is not only absent here, it is rendered simultaneously alien and irrelevant.

While the extent to which this ‘Indigenizing’ of the national legal system has worked is debatable, a strong case can be made that, throughout the process, it is actually Indigenous customary law that has been ‘steered’ and ‘contained.’ Indigenized statist processes are potentially useful pathways for the amelioration of colonial and neo-colonial intrusions, making them applicable to certain kinds of Indigenous political projects, but even granting this surface suitability they remain littered with theoretical and practical hazards and failings. Most obviously, as Buchanan points out, “the concept of a right is a product of the very culture that has exploited indigenous peoples;” (1991, p. 41) to which Wainwright and Bryan add, when Indigenous Peoples engage in legal activity, “they may not do so as anti-colonialists who refuse the very legal foundations and territory of the state” (2009, p. 164). Worse, the various meanings extracted from or attached to self-regulation as a legal norm seldom find expression in any actual right or remedy in any case. To date, in fact, almost all of the attention devoted to self-regulation as a concept within the rights discourse has been focused on defining it through limiting its scope in both domestic and international law – a clear attempt to re-centre and give exclusive jurisdiction to the state, in violation of other, pre-existing legal cultures (McCorquodale, 1994). An acceptance of the legitimacy of the institutional structures governing the process is implicit in the very act of sitting down to negotiate, while the negotiation process on the ground (versus in theory) can often be reduced to an extended attempt to convince the opposition that meeting Indigenous goals is actually in the state’s best interests (Alcantara, 2007).

Where purely moral appeals exert comparatively little persuasive force, which is certainly the case in Perú, power imbalances and entrenched interests preclude the resolution of claims in favour of ‘the Other.’ The engagement itself demands that Indigenous Peoples meet foreign standards of proof and argumentation; apply irrelevant and even antithetical ethical codes; enter into inflexible relationships on disadvantageous terms; and abandon key concepts and aspirations simply because they lie outside approved discourses. None of these are resource-light tasks, meaning that legal ‘biculturalism’ actively drains other issues and initiatives of attention and support, sapping the strength and resilience of Indigenous communities. Further, because self-understanding and self-reflection proceed through their own political language (Tully,

2000), such an enfolding/negation has serious cognitive consequences, as Indigenous Peoples are obliged not only to act but also to think in non-Indigenous terms in order to achieve fluency and persuasiveness. The rights discourse is thus a tool that, rather than merely being employed by a user, actually changes the user in the process. In Perú in particular, a rights-based strategy in pursuit of Indigenous claims clearly poses neither an actual nor an ideological threat to colonialism, nor does the process break with the methodologies of assimilation themselves.

(Un)Common Legal Ground

The Indigenous groups with the most robust *derecho consuetudinario* remain those who have had the least contact with the Peruvian legal system. Within those communities still using (or actively resurrecting) Quechua customary law, legislative hybridity or legal pluralism is surprisingly common, though not always productively so. Various forces, particularly the ripple effects of economic integration and the accelerating influence of Western, rights-based NGOs, negatively affect the local use of customary versus state law and promote a legal syncretism in which traditional norms may or may not enjoy precedence (Drzewieniecki, 1995; Tobin & Taylor, 2009). Similarly, since “[a]s long as values remain shared and lived in common, the legitimacy of customary law persists” (Drzewieniecki, 1995, p. 8), customary laws lose traction in ideologically miscegenated communities, wherein legal footing in a common worldview falters (ANDES, 2005). ANDES maintains that exercises in ‘legal coupling,’ particularly in the case of the *Parque de la Papa*, have been successful, but the recognition of customary law in these instances is still, for lack of a better term, a gift from the dominant legal system to one perceived as inferior. Like any gift, its offer is optional, and this particular one it can be rescinded at any time – after all, few national features have proven more transient than Peruvian legislation. Accordingly, the mainstream justice system is most often seen as “a form of cultural hegemony by a nation-state that neither shares nor respects highland cultural values” (Gelles, 2000, p. 156). Further, centuries of the government’s use of law to alienate Indigenous lands and attack Indigenous cultures and persons have left little faith in the system’s claimed asepsis (Ardito, 1997). It would

benefit Indigenous organizations, ANDES included, to consistently foreground their own Peoples' rationale for describing the relationship with the Peruvian state as an *engaño*.

Legal syncretism can certainly be seen as an admirable project, one not incompatible with Quechua values; it is typically undertaken with a critical eye, and in the same spirit that nurtures biological diversity in the Andean *pacha*. Tobin and Taylor (2009) find that, in legally 'hybridized' communities, specific national laws are evaluated for their compatibility or even resonance with traditional self-regulation, and elements of these laws are adopted in whole or part where consonance is found. Conversely, if the investigation shows a threat to the customary system, that national law is specifically rejected in Indigenous governance mechanisms (Dias & da Costa, 2008; Tobin & Taylor, 2009). This speaks to Mamani Ramirez's assertion that the Quechua "have a plasticity that enables them to adopt and render original that which is alien, and make it their own" (2008, p. 8). In this exercise, legal validity is being assessed according to internal criteria, which stands as its own cognitive victory, augmented by the fact that ostensibly authoritative legislation is being critically examined at all (this being a rare enough occurrence even in relatively homogeneous societies). When customary law is taken to the steps of the legislature, though, the inherent egalitarianism of Quechua society mitigates against the hierarchical order deemed necessary to fully engage with the state (Dean, 2002a).

The Peruvian Constitution does allow for limited self-regulation, and some scholars point to the country's 'innovative' inclusion of customary law in parts of the state system as a step forward (Tobin & Taylor, 2009). Yet the incorporation of *derecho consuetudinario* is arguably as colonial an act as the exclusion of *derecho consuetudinario*, particularly when that incorporation relegates Indigenous customary law to the margins of acceptance within the larger corpus of state legislation. Diversification, a process Andean cultures treasure, cannot be mistaken (or used as a cover) for ghettoization, a process in which Peruvian legislators regularly engage; in this differential incorporation it is non-Indigenous law that remains the definitive measure of what is logical, actionable, desirable, and just. Further, the relocation of *derecho consuetudinario* within Peruvian law removes it from the realm of contestation – and it was only this context that maintained a focus on the ontological, epistemological, and

political aspects of both systems, tracing their congruities and disharmonies, and positioning them as peers by any definition.

The State, Writ Large

Even operating entirely within the state system, legislation gains practical relevance only in application. Without implementation and compliance measures in place, laws do little to advance beneficial socio-political change. This is especially true in the case in Perú, where a long history of ‘saying the right thing’ legislatively finds no similarly robust correlate in terms of ‘doing the right thing’ practically. The communities of the *Parque de la Papa*, through and with ANDES, have chosen to force (or defer) some of these issues by shifting their attention to the global arena. If a key problem in Perú has been state compliance with international law, though, that hurdle is not likely to be levelled by shifting geography. Just looking at the issue of Indigenous knowledge, for example (a primary concern of the communities and ANDES), as of 2006 eleven different agencies within the United Nations system were carrying out protective, conservative, and promotional activities,⁷⁹ along with the World Trade Organization (WTO), International Labour Organization (ILO), World Intellectual Property Organization (WIPO), and the World Bank (IBRD). The only one of these bodies in possession of a functioning compliance mechanism is the WTO, an organization in which Indigenous nations do not even merit observer status. In terms of legislation, international treaties that are legally binding do not explicitly address traditional knowledge, while instruments that characterize traditional knowledge as the inalienable heritage of Indigenous Peoples are part of the body of international ‘soft law.’ The end result is that Indigenous knowledge, despite a seeming juggernaut of champions, remains essentially unprotected (Swiderska, 2006; Tobin & Taylor, 2009). Whether this is an outcome of poor integration of agencies and mandates, diverging state interests, or an underlying resistance to the meta-project itself, it demonstrates that rhetorical victories –

⁷⁹ These include the Convention on Biological Diversity (CBD), Convention to Combat Desertification (CCD), Food and Agriculture Organization of the United Nations (FAO), United Nations Conference on Trade and Development (UNCTAD), United National, Educational, Scientific and Cultural Organization (UNESCO), and the United Nations Permanent Forum on Indigenous Issues (UNPFII), among other (Tobin & Taylor, 2009).

however unprecedented – best serve rhetorical persons. Brysk, not surprisingly, finds that many of the states facing global pressure to amend their policies on Indigenous Peoples merely “practice international appeasement rather than democratic accountability – with the unwitting collaboration of global civil society” (2000, p. 286). Ultimately, the foundations of the international system orbit the recognition and reinforcement of state sole or overriding sovereignty, and the assumption that the omissions, ambiguities, and other failings of international legal instruments are correctible mistakes (or mistakes at all) may itself be erroneous. All strategies based on these assumptions would, as a result, fail to yield the hoped-for (or needed) results, while simultaneously levying significant opportunity costs in already resource-strained Andean Indigenous communities.

Salience & Significance

A Challenge to ‘Absence’ & ‘Lack’

In part, the ‘absence’ of highland peoples on the Peruvian political stage can be cogently traced to the complexity of Indigenous self-identification in the *altiplano*, an activity that has ranged from socio-economically disadvantageous to pointedly life-threatening over the course of the past several generations. As a result of Indigeneity being assigned from without instead of arising from within, cultural affiliation is an exceedingly complex issue in Perú. The very concept of ‘Quechua,’ particularly over the past hundred years, has been interpolated according to intellectual and state discourses (Devine, 1999). Even sympathetic individuals have acted with an erosive paternalism: President Juan Francisco Velasco Alvarado,⁸⁰ out of concern that *indigena* status hindered social mobility, told Andean Indigenous people, “[y]ou are not an Indian anymore; you are a peasant,” (as quoted in Ardito, 1997, pp. 19-20), and proceeded to structure a massive rural reform around this artificial rebirth. The Peruvian Constitution, in fact, still refers to Indigenous individuals in the *sierra* and *costa* simply as *campesinos*,⁸¹ a term that purposefully omits their standing as the country’s original

⁸⁰ Velasco held office from October 3, 1968 to August 30, 1975.

⁸¹ The same document refers to Amazonian Indigenous Peoples in Perú as ‘natives.’

inhabitants. When external descriptors fail to speak to one's sense of self, in addition to glossing or erasing history in terms of time, place, and cultural specificity, identification cannot help but be, as Devine observes, 'thin' (1999, p. 65). De la Cadena sees, instead of 'thin' identification, a category of 'Indigenous' that is actually a mixture of class, race, and culture (de la Cadena, 1998). In terms of the political implications of self-identification: the tendency of urban elites and the government itself to deploy Indigenous symbols and terms for their own purposes, ostensibly promoting while actually appropriating cultural elements not their own, has further complicated both positive affiliation with living Indigenous culture and negative affiliation with the state that seeks their erasure (Van Cott, 2005). The ultimate outcome of this blurring, according to García and Lucero, is that "Indianness is emptied of its subversive potential" (2007, p. 235). Additionally, geographical, political, and cultural forces have fed the localization, rather than nationalization of Quechua identity. There are eight Quechua dialects and cultural groups, scattered down the entire length of the *cordillera*, in addition to their communities showing not insignificant economic and social diversity even within a single dialect or region (Van Cott, 2005). Exploitation and marginalization have accentuated this turn to the local, producing even greater variation across the Peruvian *altiplano* (Freeland, 1996). Quechua identity, then, today manifests as local; further, this grounding in particular places is something of which communities and regions are well aware, and in which they find strength and pride (Salomon, 1982; Van Cott, 2005).

A great deal of collective action occurs in the Andes, it simply takes place at the communal and inter-communal level. Quechua culture is agrocentric, orbiting the nurturing of land in and around cultivated fields; Quechua are *chakra Runa*. That identity is local, particular, and unscaleable – except via the formation of *ayllu* within *ayllu*, the structure of Tawantinsuyu reinterpreted. Unfortunately, social movements theory has been all but obsessed with state-oriented, fully visible, and relatively politically uncomplicated organizations; as if massification is the sole yardstick of legitimacy and success, when in reality the only 'lack' in failing to form national political parties is one of formalism. Any quantification that arrives at 'absence' amounts to a straightforward category error, given the community focus of Quechua politics and the extreme biocultural diversity and concordantly uneven penetration of imperialism into the

Andes. Decolonization scholars do not escape criticism on this point, either. The history, structures, and processes of colonialism differ – substantially, albeit within a continuum of familiar practices – in Latin America. The development of a robust body of legal-political literature and instruments based on the Anglo-American and Oceanic experience is, therefore, an ‘outsider imposition’ of its own (as well as an underexamined problem). The example of the *Parque de la Papa* thus reminds investigators to look in more and different places than one would find familiar political formations, as well as to reconsider the drive to universalize particular metrics and theories of action – both Indigenous and non-Indigenous. It additionally speaks to the fact that inflation to the national level and deflation to the individual level are equally colonial trajectories of self-actualization, both based on a lack of understanding of the affective dimension of interdependence. One disregards unity, the other assumes it, with the same end result: unsustainably thin identification with others, and hence weak solidarity.

Different colonial political powers have managed to be unlike one another (nationalist, cessationist, socialist, capitalist, military, authoritarian, democratic, governmental, non-governmental, union, *campesino*, in various combinations and permutations); yet they have also managed to be unlike the *ayllu*, invariably operating against its logic and disrupting its function. Indigenous communities in the Andes have coevolved with the political, as well as the biological environment, selectively subverting, sometimes entirely evading, and occasionally succumbing to these colonizing forces. This is a process which, over centuries, has resulted in a vast array of dissimilar political and social formations that are, nonetheless, Quechua. The struggles of Andean Indigenous communities are thus both similar and divergent, and play out according to ‘the logic of the local’ – which is an indisputably Quechua trait. Further, it takes time to dismantle false identities, particularly longevous and purposefully created ones that have not been entirely politically useless (and have, on more than one occasion, saved traditional communities and ancestral practices from material erasure). Arguably, to evaluate according to alien schedules, to find the ‘lack’ to be a matter of missed opportunity or ‘untimeliness,’ is also to commit a category error. It must be remembered, too, that class-based agitation, along with the relationships thereby forged, is currently being transcended at a point when its utility is still pronounced, making disengagement

no easy task. And finally, if scholars are looking for signs of the passing of political megafauna, those signs are as plentiful in the Peruvian *altiplano* as they are in neighbouring Bolivia and Ecuador: peasant organizations, *indigenista* intellectual movements, NGO blooms, and ethnic federations have come and gone – and not without leaving their mark on the social, cultural, and legal landscape (cf. García & Lucero, 2004). The fact that no one of these formations made a move for the levers of state power can premise an argument in favour of much, much more than ineptitude or apathy. Logically, from the Quechua perspective, there can be no debt payable to the wider community that bankrupts the local one. In order to be tenable, any large-scale movement would need to reflect the synechdoche and concentricism of Andean place-based affinity: the most immediate *ayllu* at the centre, surrounded by wider and wider circles of affiliation; *ayllu* within *ayllu* within *ayllu*.

An Andean Decolonization Pathway: Inculcating 'The *Ayllu* Mindset'

The Andean *ayllu*, beginning in that moment of first contact with European perspectives, has been endlessly reinterpreted. In its circuit through academia it has acquired all meanings and none, defying scholars' desire for a stable, concise, relatable definition. The *conquistadores* saw in it a kind of feudal organization (Godoy, 1986), while 16th century Quechua dictionaries define it broadly, as “any kindred” (Spalding, 1973, p. 583). In the opening years of the 20th century, *allyus* came to be regarded as “broken fragments of the Tiahuanaco⁸² civilization” (Means, 1920, p. 510). By the mid-1940s *ayllu* had either become simply another word for ‘community’ (Castro Pozo, 1946; Weismantel, 2006); or alternatively, remained a term “almost unidentifiable” (Mishkin, 1946, p. 441). ‘Village’ and ‘clan,’ connoting ‘tribe,’ have also been common interpretations, largely anthropological in origin (Bastien, 1978; Rowe, 1946). In 1981, a frustrated Peruvian historian declared the plasticized concept “useless” (Pease, 1981, p. 19), while non-Indigenous development workers, environmentalists, and self-professed

⁸² Tihuanako or Tiwanaku is the name commonly given to a key Pre-Columbian archaeological site in western Bolivia.

anarchists have become prolific scribes of “some of the most radically essentialist statements about the ayllu,” investing the concept with their own ambitions and prejudices (Weismantel, 2006, p. 90). Similarly, funding organizations now see in the *ayllu* “an authentic subject of global ‘rights talk’” (Albro, 2005, p. 22). Being scattered across a vast geographical area, and having existed and undergone adaptation since pre-Inkaic times, it seems natural that *ayllu* would diverge in modern Perú, Bolivia, and Ecuador, resisting definitional standardization. It also seems natural that, as they arise from a non-Western worldview, in all times and places *ayllu* would prove difficult to filter through Euro-American conceptual (particularly historical and ethnographic) lenses. This is, perhaps, its most important characteristic of the Andean *ayllu*: its utter opacity to the epistemic supports of colonialism. This characteristic is key because it is where truly subversive potential lies.



*Spanish cathedral built atop Inkan walls, Qosqo City;
Every time the city experiences an earthquake the cathedral collapses
– the Inkan foundations never fall*

Fernandez writes that, “it is time that the ayllus cover the whole Andean *pacha* again, thus recovering their fullness” (1998b, p. 235). This would mark a Quechua decolonization movement far more than an ambition to occupy the executive. There is

nothing timid about relocalization, just as there is nothing truly radical about party politics. To retrench Quechua life in the *ayllu* is to reject the reductionism and metrics of colonialism, to reassert an Andean field of orientation and see its breadth as offering up a spectacular range of alternative political possibilities – not alternative states or alternative capitalisms or alternative liberalisms, but alternatives to all of these, impossible to imagine from within the roster of currently accepted options. The *ayllu* has always been the centre of Indigenous resistance in the Andes, and only an anaesthetizing passage of time and the creep of colonialism into the realm of true familiarity (when its numbing effect can be confused for comfort, and it loses the strangeness that always recalls an essential divide) has obscured that fact. Living within this unique entity gives rise to what Argumedo refers to as “the *ayllu* mindset” (2010, p. 1). There is no need to predict what could or should arise afterward; to predetermine is to narrow the range of what is possible, which is the antithesis of the diversity that characterizes the Andes themselves, and which is protected and further elaborated in the *chakra* of Quechua *ayllu*. The *ayllu* is thus the only possible guarantor of an autonomous Indigeneity and defensible territoriality, since it is through the *ayllu* that existence outside of the colonial becomes first, conceivable and second, actionable. In this, the *ayllu* becomes its own strategy of resistance, as well as generating strategies of resistance – making it the antithesis of the colonial seen as both a sickness and as the source of sickness. Vasquez supports this conclusion when he asserts that, “decolonization began the day after the European invasion and has lasted until today. Its sign is [...] the recuperation of the harmony of the *ayllu* disturbed by the invasion” (1998, p. 118).

The defining characteristic of the Andes is diversity: of biota and abiota, weather, culture, knowledge, language, economy, and every other permutation and articulation of life. It is the imposition of homogeneity – the reductions of colonialism, in which being is lifted from locality and washed of history – that thus constitutes the greatest threat to the Quechua as a physical and ideological presence on and of the land. Fortunately, it is the historical nature of *chakra Runa* to adapt and innovate, to not merely protect but elaborate diversity, and those in the *Parque de la Papa* know that not all experiments will prove successful (and that failures can show in process or product, concept or material, immediately or in months’ or years’ time). In the Andes, to cultivate the land is to

engage in trial-and-error and sustain the conversation between human and non-human elements of creation (Gonzales & Gonzalez, 2010). Further, the emphasis here is not on *reiterative* (cultural-traditional) acts but *recreative* ones (Rengifo Vásquez, 1998), and to have multiple strategies for staying on the land and perpetuating an Andean mode of living. Moreover, the *Parque* is about autonomy; the ability, will, and right of the communities to provide for themselves in their own territories, in their own time, in a manner consistent with their own frames of reference. The initiative self-consciously builds on the relationship between *Runakuna* (Andean Peoples) and *tirakuna* (Andean lands), drawing on and reciprocating the strength of the *pacha*. This is a struggle to maintain Quechua meanings and systems of meaning, which in some cases need to be resurrected, refashioned, and reimposed – yet because it is based on daily living, on being in community and on the land, the effort resists degeneration into dogmatism, intellectualism, or essentialism. Nurture, or ‘affective caring’ is the defining and unifying endeavour of the *ayllu*, delineating work internal and external to the community and demanding that these efforts be active and tangible, rather than rhetorical (Rengifo Vásquez, 2010). The meta-experiment underway in the confederated communities thus takes shape as myriad projects and systems rooted in the society of the *ayllu* and relationality of extended kinship; the ethical frame of *rakinakuy*, *yanantin*, and *ayninakuy*, backed with the authority of *derecho consuetudinario*; and oriented toward the cultivation of *sumaq kausay*. It entails protecting Quechua systems (not resources, innovations, or other mere shards of systems) in their cultural, temporal, and spatial dimensions.

Perhaps most importantly, The *Parque de la Papa* establishes that the Andean *ayllu* is not simply a ‘nested segmentary organization.’ It consists of networks of fields, markets, families, sacred beings, Andean languages, historical memories, systems of mutual aid and defence, and land-occupying *Runakuna*. Somehow, despite decades of theorizing about Indigenous resistance in the Andes, it still evades academics’ and policymakers’ attention that, when one removes ‘nation-state’ from the field, there remains a dizzying array of banners under which to muster. The communities of Sacaca, Chawaytire, Pampallacta, Paru Paru, and Amaru have picked one such alternative: on the upslopes of the Urubamba Valley, in an Andean *ayllu* composed of Andean *ayllu*, a

biocultural territoriality that epitomizes what Allen (1997) calls Quechua 'synechdochal thinking.' Though not unscathed, this formation has already outlasted the *conquistadores*, the missionaries, the Viceroyship, and the Republic, and has yet to be overcome by any state.

Conclusion

High in the *altiplano* outside Qosqo, an undertaking that began as a straightforward environmental conservation project has actually unfolded as is an initiative of *tremendous* scope, encompassing the resurrection and adaptation of Quechua forms of traditional governance, economic exchange, subsistence agriculture, customary law, communication, and collaboration. The *Parque de la Papa* is a very simple name for a very complex idea: that the *papa*, the potato that virtually everyone on Earth now ingests regularly (and inattentively), is cradled by, participates in, nourishes, and signifies a millennia-long reciprocal relationship between *Runakuna* (Andean Indigenous Peoples) and *tirakuna* (Andean Indigenous lands). It is worth noting that both of these terms are pluralized by the suffix *-kuna*, which refers not to ‘more than one,’ as in a number of individual persons and locations, but to a collective, a gestalt, something whole and unified but fundamentally various. *Runakuna* and *tirakuna* together are the Andes, in all its diverse iterations.

The term ‘place,’ here, does not refer to geography. It references articulations of relationships, human and nonhuman, embedded in complex, layered histories; set in particular locations; bounded, grounded, and linked to everyday practice. This idea of ‘place’ is the cell of being and knowing in Quechua thought, as well as fitting with wider claims that Indigeneity is a place-based consciousness. This is not place a bounded territory, as in a series of lines on a map. Instead, it is a specifically located matrix of the biophysical and the spiritual that produces and is produced by culture. It is the people and their land, the land and its people – where the pronouns ‘their’ and ‘its’ connote not just *possession of* but *belonging to*, and where ‘land’ is more than ‘terrain.’

The conceptual framework employed in the communities and by ANDES is thoroughly emplaced. It is a cognitive and affective scaffold that arises from and returns to the interplay between *Runakuna* and *tirakuna* in this specific location, with a traceable historical trajectory from past to present. This is a place-specific vision of The Good, with no pretence of universality, based on Andean cosmology, authority, and relationality. The strategies that are the most successful in enacting this conceptual framework are similarly emplaced: those actions that constitute a skilful, conscious, and

intense place-engagement. Not coincidentally, these tactics are also the ones that do not merely find grounding in traditional concepts but actually vivify and perpetuate those concepts – building and rebuilding the conceptual framework even as they draw from it. Such strategies manage to avoid degeneration into rhetoric precisely because they embrace the everyday, the lived, the practical, and the bodily. They do not concern learning about or discussing or even wholeheartedly believing in, but instead actively participating in relationships of reciprocity that affirm reciprocity as the moral scaffold of Quechua life.

Where the strategic framework begins to float free from the conceptual framework, to diverge from it, is in those tactics that entail abstracting place; the activities that fail to speak to peoples' experience of and from their particular territory, their particular community. Where this untethering is surest and quickest is in those strategies that play out in, or are fundamentally oriented toward, certain non-local fora and non-local entities. This observation gains importance in light of the realization that the communities of the *Parque de la Papa* and Asociación ANDES have no problem connecting non-local *places*. Foods, for example, intimately link places through the traditional institution of barter and the contemporary trade routes and non-monetized markets that cover vast vertical and horizontal terrain in the Andes. Moreover, some of the most successful decolonization and resurgence initiatives underway in the Parque involve Andean communities linking their work with similar work underway in the Horn of Africa. So distance and disparity are not *per se* significant hurdles – at least not to connecting places. Where the projects undertaken lose focus and footing is in trying to bridge not to other *places*, but to the *spaces* constructed by capital and state.

But what does that loss of focus and footing actually mean? To begin with, it reflects the fact that these communities and this NGO are still trying to figure out how, exactly, to shift scale; how to successfully link the local and the global. More than this, though, it indicates that moving from the *logic of place* to the *logic of space* has consequences that can (and perhaps should) read as failures of strategy – at least according to the criteria employed in this research. These consequences go beyond the material, since where those place-based strategies vivified and perpetuated an Andean conceptual framework, space-based strategies did not. Here, there were no relationships

of reciprocity demonstrating the value of reciprocity, and none could be forged. Here, rhetoric could – and regularly did – overtake relevance.

These strategic shortcomings also speak to the fact that place, in the Quechua sense, is irreducible and unscaleable. This point is lent significance by the percentage of ANDES' strategizing that involves appeals to and participation in the United Nations and other, similar bodies – bodies that demand both massification and essentialism. These are spaces in which Andean place-based politics has trouble finding traction for the same reason that it has been almost entirely overlooked in decades of analyses of Latin American Indigenous mobilization: because it lacks scale. This does not mean that place is necessarily, for lack of a better term, a parochial project; what is being asserted is that whenever the social and political terrain of struggle leaves place behind, it abandons the conceptual points of reference necessary to map any mode of being other than the one offered by consumerism and citizenship. In other words: while it has long been obvious that how one fights matters, where one fights matters, too.

The question then becomes: how does one speak for place, without engaging in abstraction? How does one fight for it, without engaging in reduction? Further, how can the conditions necessary for places to flourish be identified and satisfied, so that places exist in the first place, to be spoken for, to be fought for? Ultimately, this thesis is able to accomplish little more than pointing to where some truly remarkable ideas are coalescing. Because these are the questions that are circulating through the communities of the *Parque de la Papa*, and occupying the minds of the staff at Asociación ANDES – not merely as topics of discussion, but as lived experiments, as strategies rooted in concepts rooted in places. Accordingly, it seems likely that such engagements could be found not just here, but wherever *place* is the Indigenous resurgence project, wherever *place* is an Indigenous decolonization praxis.

Appendix A

Glossary of Foreign Words & Phrases

allin	Runasimi	good; healthy; right
allin kausay	Runasimi	well-being
allin wata	Runasimi	the growing season
allpa	Runasimi	soil; land
alpaca	Runasimi	Andean camelid (<i>Lama vicugna f. pacos</i>)
altiplano	Spanish	highlands (literally ‘high plain’)
alwirhas	Runasimi	beans (<i>Phaseolus spp.</i>) or peas (<i>Lathyrus spp.</i> and <i>Vigna spp.</i>)
amaru	Runasimi	a mythic reptile associated with <i>pachakuti</i>
andenes	Runasimi	terraces
andino (‘lo andino’)	Spanish	Andean culture
apu	Runasimi	mountain protector, often glossed as a deity; attendant, sacred hill
aqha	Runasimi	fermented drink made out of <i>sara</i> or <i>kinwa</i> , called <i>chicha</i> in Spanish, often used ceremonially
arariwa	Runasimi	field guardian
asociación	Spanish	association
auki	Runasimi	the sacred; the realm of the spirits; also known as huacas
away	Runasimi	to weave; weaving
ayllu	Runasimi	network of families; community; a uniquely Andean cultural landscape (see p. xx)
ayllu masi	Runasimi	‘mates;’ neighbours; those sharing an <i>ayllu</i> relationship
ayni	Runasimi	exchange; reciprocal assistance
ayninakuy	Runasimi	usually rendered as ‘reciprocity’ in English, but additionally encompassing the principle of equality; the principle whereby what is

		received is to be given back in equal measure; the basis for negotiation and exchange within the human realm and between the human and other realms of creation
biopluralismo	Spanish	'biopluralism,' a term used to describe the social and political systems of Latin American Indigenous Peoples
buen vivir	Spanish	'well-living,' typically used in Ecuador
campesino	Spanish	rural farmer; peasant (perjorative)
ceque	Runasimi	literally 'line,' commonly used to refer to Inkaic pathways
ch'aka	Runasimi	bridge; union
ch'arki	Runasimi	dried meat, traditionally of camelids (source of the English word 'jerky')
ch'uka	Runasimi	a medicinal, wild plant (<i>Medicago sp.</i>) known in English as 'medick' or 'burclover'
ch'ullo	Runasimi	Quechua traditional woven hat, made and worn by men, adorned with tassels and fine beads
ch'uñu	Runasimi	naturally freeze-dried potatoes (literally, 'frozen potato')
ch'uru	Runasimi	snail
chakitaklla	Runasimi	Andean foot plow
chakra	Runasimi	agrarian plot; field marked off for cultivation
chakra runa	Runasimi	farmer
chakrayoq	Runasimi	owner of a <i>chakra</i>
chalaypasa	Runasimi	a network of barter markets adapted from the Andean tradition of trading unique produce between different agroecological zones
chalo	Runasimi	a mixture of species planted in a single chakra; intercropping
cheqche	Runasimi	protected, threatened species of Andean native tree (<i>Citarexylum denticulatum</i>)

chillka.....	Runa Simi.....	sweet, candy-like potato traditionally served at birthdays and weddings
chisaya mama.....	Runasimi/Spanish	‘mother grain’ or ‘mother of all grains,’ another name for <i>kinwa</i>
choclo.....	Runasimi	ear of <i>sara</i>
ch’uñu	Runasimi	freeze-dried potatoes
cocaleros	Spanish.....	<i>kuka</i> farmers
compadrazgo.....	Spanish.....	godparent relationship
conquistadores.....	Spanish.....	soldiers and mercenaries, the vanguard of Spanish colonialism in Latin America
cordillera	Spanish.....	from the Spanish word for ‘cord,’ a mountain range that runs along a coastline
costa	Spanish.....	coastal plains, one of the three common divisions of Perú (the others being <i>sierra</i> and <i>selva</i>)
derecho consuetudinario ..	Spanish.....	customary law
engaño.....	Spanish.....	‘constant deception,’ a sense of being tricked and betrayed; a term used by some Peruvian Indigenous communities to refer to their historical relationship with the state
gamonales	Spanish.....	land barons
hacenderos	Spanish.....	plantation owners
hanan pacha.....	Runasimi	the upper world; the world where the spirits reside
hawas.....	Runasimi/Spanish	fava or broad beans (<i>Phaseolus lunatus</i>)
indigenista.....	Spanish.....	student, supporter, or promoter of Indigenous cultures or causes
indio	Spanish.....	literally ‘Indian,’ a designation used as a slur (the ‘polite’ term being <i>indigena</i>)
inidgena.....	Spanish.....	Indigenous individual
Inka	Runasimi	an Indigenous Andean <i>ayllu</i> that grew to incorporate those around it, creating <i>Tawantinsuyu</i> ; also the time in which

this group flourished, from the 13th to the mid-16th century; Hispanicized as *Inca*

inti	Runasimi	the sun; the sun spirit
janpeq	Runasimi	herbal healer
k'culli	Runasimi	a dark purple variety of <i>sara</i> (<i>Zea mays</i>), known as <i>maiz morado</i> in Spanish, used primarily to make <i>aqha</i> (the resulting beverage is known as <i>chicha morada</i> in Spanish)
kargu	RunasimiSpanish.....	responsibility; sphere of responsibility; weight (from the Spanish word for 'burden'); an office performed for one's community, often accompanied by financial responsibility for the task
karguyoc.....	Runasimi/Spanish	individual in charge of a <i>kargu</i>
kausay	Runasimi	crops; life, to live, living; foodstuff
kawiltu.....	Runasimi	deliberation in councils
kay pacha	Runasimi	this place in this time; this world, symbolized by the cougar; the world of physical birth and decay
khuyay.....	Runasimi	protection and care
killa	Runasimi	the moon; the moon spirit
kinwa.....	Runasimi	often written as quinoa (<i>Chenopodium quinoa</i>), a common seed food noted for its high nutritional value, particularly its protein content
kiwicha.....	Runasimi	the most important Andean species of amaranth <i>Amarantus caudatus</i> ; an unusually nutritious grain prized by the Inka, used in both food and ritual
kuka.....	Runasimi	leaves of the coca plant (<i>Erythoxylon coca</i>), Anglicized as 'coca'
latifundios	Spanish.....	large, privately owned estates where slave labour was used to produce crops for export
laymes	Runasimi/Spanish	sectoral fallow system
llakuma.....	Runasimi	a sweet tuber (<i>Smallanthus sonchifolius</i>), Hispanicized as <i>yacón</i> ,

		with both nutritional and ceremonial importance throughout Andean history
llama.....	Runasimi.....	Andean camelid (<i>Lama guanicoe f. glama</i>)
llankay.....	Runasimi.....	work, industriousness
llunka.....	Runasimi.....	wheat
maca.....	Runasimi.....	herbaceous Andean perennial (<i>Lepidium meyenii</i>) whose taproot is employed as both a food and a medicine; one of the more famous targets of biopiracy in the altiplano
machu.....	Runasimi.....	‘ancient one’
mallki.....	Runasimi.....	plant
mancha india.....	Spanish.....	literally, ‘Indian stain’ or ‘Indian blot,’ the term used to refer to the five Peruvian departments in which Indigenous Peoples constitute a numerical majority
maswa.....	Runasimi.....	perennial tuber (<i>Tropaeolum tuberosum</i> and/or <i>Tropucolum aestium</i>), related to nasturtiums, that can be eaten raw or cooked
mate.....	Runasimi.....	tea
mestizaje.....	Spanish.....	miscegenation; ideology of cultural/racial mixing
mestizo.....	Spanish.....	person of mixed Indigenous and European (esp. Spanish) descent; also used to refer to individuals who speak Spanish and display European cultural traits but who are not considered white
mikhuna wasi.....	Runasimi.....	restaurant (literally, ‘house of food’)
mikhuna.....	Runasimi.....	food
mink’a.....	Runasimi.....	communal effort; festive labour
mirinday.....	Runasimi.....	traditional dish consisting of tubers, <i>qowi</i> , and <i>ch’uru</i>
misti.....	Runasimi/Spanish.....	Quechua term for the Spanish <i>mestizo</i>
moraya.....	Runasimi.....	a type of <i>ch’uñu</i> made from very bitter potatoes (<i>papa ruki</i>), washed in a

		stream for three weeks prior to freeze-drying
moro boli	Runasimi	a red potato variety, high in antioxidants
muchuy wata	Runasimi	year of scarcity or difficulty
muhu	Runasimi	seed
munayniyoq	Runasimi	‘those who own the will;’ individuals who listen to no reason but their own
muyuy	Runasimi	return; regeneration
ñaupa	Runasimi	ancient; old; ancestral
novoandina	Spanish	literally ‘new Andean’
nuestra derecho	Spanish	literally ‘our law,’ how Quechua communities refer to Indigenous customary law
oca	Runasimi	starchy tuber (<i>Oxalis tuberosa</i>) whose shoots and leaves are also edible
ohasito	Runasimi	variety of <i>papa</i> containing a natural antidepressant
onqoy	Runasimi	sickness, disease
oke suito	Runasimi/Spanish	long, bluish <i>papa</i> that is usually eaten boiled
(la) otra justicia	Spanish	literally ‘the other law,’ how Quechua communities refer to the Peruvian/state legal system
pacha	Runasimi	house (used both literally and metaphorically); domain; locality; microcosmos; space/time; the universe; the earth
pachakuti	Runasimi	restorative inversion of time, a period of profound change and renewal; ‘the world returning to itself’; revival or reawakening
pachamama	Runasimi/Spanish	‘the land that nurtures like a mother’
pagos	Runasimi	ceremonial offerings
pakarina	Runasimi	sacred groves
papa	Runasimi	Andean potato (<i>Solanum andigenum</i> , but also <i>Solanum stenotomum</i> , <i>Solanum chaucha</i> , <i>Solanum ajanhuiri</i> ,

		<i>Solanum curtilobum</i> , <i>Solanum juzepczukii</i> , and <i>Solanum phureja</i> , among others), a starchy tuber of the nightshade family; not to be confused with the single species that dominates worldwide (<i>Solanum tuberosum</i>)
papa atoaq	Runasimi	‘wild’ varieties of <i>papa</i> (<i>Solanum petota</i> , <i>Solanum acaule</i> , and <i>Solanum chacoense</i> , among others)
papa haya	Runasimi	bitter, frost-resistant <i>papa</i> , planted at very high altitudes
papa miski	Runasimi	generably more readily edible varieties of <i>papa</i> that are acclimated to lower altitudes
papa mukhuna	Runasimi	<i>papa</i> without bitter alkaloids, planted at mid-level altitudes
papa ruki.....	Runasimi	very bitter species of <i>papa</i> (specifically <i>Solanum curtilobum</i> and <i>Solanum juzepczukii</i>)
papalisa	Runasimi	a root and leaf vegetable (<i>Ullucus tuberosus</i>) primarily eaten as a tuber; sometimes referred to as <i>olluco</i>
papamanca.....	Runasimi	traditional earthenware pot used for cooking tubers; the name of a local food restaurant and gastronomy collective centered in the community of Chawaytire
papa arariwa	Runasimi	‘guardian of the potato,’ an individual respected for his or her knowledge of <i>papa</i>
paqo.....	Runasimi	holy man, one who converses with the spirits; shaman; priest; healer; diviner
para wata	Runasimi	rainy year
parque.....	Spanish	park
peones	Spanish	labourer, especially on working on an agicultural estate
picchu	Runasimi	ascent/climb; peak
pinku pinku	Runasimi	a medicinal, wild plant (<i>Equisetum sp.</i>) known in English as ‘horsetail’
pinu	Runasimi	pine

pumamaki.....	Runasimi	a dark, almost black potato typically shaped like a puma's claw, which according to myth chose its own shape
puna.....	Runasimi	tundra-like grasslands characteristic of a region of very high altitude; one three Andean agroecological zones, lying above 3,500 metres
puquy uku.....	Runasimi	the hot/rainy half of the year
q'achun waqachi	Runasimi	'that which makes the daughter-in-law weep,' a deeply grooved potato that is peeled by a prospective bride to prove her skill and dedication; also known as <i>huaahat</i> ; one of the women's economic collectives in the <i>Parque de la Papa</i>
qhatuy.....	Runasimi	market
qhepa.....	Runasimi	a temporal/spatial concept meaning both 'future' and 'back/behind'
quechua	Runasimi	one of three Andean agroecological zones, lying between 2,300 and 3,500 metres above sea level
queuña.....	Runasimi	protected, threatened species of Andean native tree (<i>Polylepis incana</i>)
qowi.....	Runasimi	Andean domesticated rodent (<i>Cavia tschudi</i>), Hispanicized as <i>cuy</i> and known in English as a 'guinea pig;' a common, culturally and nutritionally significant Andean domesticated animal
rakinakuy.....	Runasimi	usually rendered as 'equilibrium,' 'balance,' or 'harmony'
raymi	Runasimi	festival
ripullu	Runasimi	cabbage
rit'i.....	Runasimi	glacier; snow
runa	Runasimi	Quechua person; human being; locality; the domestic sphere; the realm closely surrounding and most immediately containing humans
runakuna.....	Runasimi	Quechua people (plural of <i>runa</i>)
Runasimi	Runasimi	language of the <i>runakuna</i>

sallqa	Runasimi	the natural community; the 'wild' or undomesticated realm
samilla cansada	Spanish	'tired seeds,' a serious condition affecting cultivars, believed to be caused by a virus and leading to the extinction of affected variety
sapallu	Runasimi/Spanish	any squash, the most common of which is a large pumpkin-like specimen (<i>Cucurbita maxima</i>)
sara	Runasimi	any of numerous varieties of maize (<i>Zea mays</i>)
selva	Spanish	jungle or rainforest, one of the three common geographical divisions of Perú (the others being <i>sierra</i> and <i>costa</i>)
sierra	Spanish	mountainous region or high plains, one of the three common geographical divisions of Perú (the others being <i>selva</i> and <i>costa</i>)
simi	Runasimi	language
sipas	Runasimi	girl; young woman
siwara	Runasimi	barley
suamanchachi	Runasimi	purple potato shaped like a crouching human figure, believed to scare away thieves
sumaq kausay	Runasimi	'the beautiful life,' 'the good life' (in the moral sense), marked by balance/harmony; 'how to live together/in community'
sumaq	Runasimi	beauty; tenderness
suroach'i	Runasimi	mountain sickness; altitude sickness
tarwi	Runasimi	lupin (flower) or lupin (legume), obtained from the same plant (<i>Lupinus mutabilis</i>)
Tawantinsuyu	Runasimi	the Inka Empire; literally, 'land of the four quarters' (coast, plateau, mountain, and jungle); a pre-Hispanic multiethnic Indigenous confederation encompassing parts of Perú, Colombia, Ecuador, Bolivia, and Chile

technico	Spanish	technician
telar de cintura	Spanish	backstrap loom (literally, 'belt loom')
thaki	Runasimi	path; service (especially to community)
tikpa	Runasimi	system of turning over the earth without tilling, necessary to conserve topsoil in <i>chakra</i> with a sharp vertical gradient
tirakuna	Runasimi	places; sacred places (a Quechua adoption and pluralization of the Spanish <i>tierra</i>)
truki	Runasimi/Spanish	barter (from the Spanish <i>trueque</i>)
ttalaco	Runasimi	a banana-shaped potato, used for distillation
ukhu pacha	Runasimi	the underworld, symbolized by a snake; the world below; where the bones of the ancestors lie; where the dead and unborn reside
usyai killa	Runasimi	months of little rain
usyai uku	Runasimi	the cool/dry half of the year
usyai wata	Runasimi	dry year
uyja	Runasimi	sheep
uywaqninchis	Runasimi	'the ones who nurture us,' another name for the <i>apu</i>
varayoq	Runasimi	'officeholder;' traditional authority empowered with decision-making; appointed village official (a portmanteau of the Spanish word for 'staff' and the Quechua word for 'master' or 'elder')
vicuña	Runasimi	smallest of the Andean camelids (<i>Vicugna vicugna</i>)
vivir buen	Spanish	living well, most commonly used in Bolivia
wachanqanku	Runasimi	to give birth
wak'a	Runasimi	spirits; sustainers of life; sacred place
waca	Runasimi	cow (from the Spanish <i>vaca</i>)
warmi	Runasimi	woman

wasi	Runasimi	house
wata	Runasimi	annual cycle of nature; the agricultural year; the ritual year; telluric-sidereal rhythm
willaq	Runasimi	messenger; spokesman
yachaqkunato	Runasimi	knowledge holders; elders
yachay	Runasimi	knowledge, to know; wisdom
yahuar chonka	Runasimi	A medicinal, wild plant (<i>Oenothera rocea</i>) known in English as ‘pink evening primrose’
yanantin	Runasimi	duality; the idea that everything has its complementary opposite; a key principle of Andean thought, according to which all objects, concepts, and structures naturally occur in pairs
yanapay	Runasimi	voluntary aid
yanapakuy	Runasimi	labour voluntarily given without the expectation of the receiver reciprocating in kind
yana bole	Runasimi/Spanish	small, round, black-skinned <i>papa</i> used to sweeten savoury dishes
yapa	Runasimi	an extra amount of goods handed over between women traders, after the completion of bartering, with which they affirm their friendship and mutual commitment to future exchanges
yukaliptu	Runasimi/English	eucalyptus (<i>Eucalyptus globulus</i>), an invasive species of very fast-growing, economically important tree, planted in the Andes to meet deforestation-amelioration goals and/or as a cash crop
yunga	Runasimi	one of three Andean agroecological zones, lying at and below 2,300 masl
yupaychay	Runasimi	respect

Appendix B

Glossary of Specialized & Technical Terms

agrobiodiversity (agricultural biodiversity): a subset of biodiversity, “the result of natural selection processes and the careful selection and inventive developments of farmers, herders and fishers over millennia (FAO, 2004b).

agroecology: the science of combining and applying principles drawn from agronomy and ecology, in order to render agriculture sustainable and environmentally sound (Troeh & Donahue, 2003).

agroecosystem: “an ecosystem under agricultural management, connected to other ecosystems” (OECD, 2001).

biocultural heritage: “includes a wealth of biological resources from genetic to landscape level, and long standing knowledge and practices that are vital for food and health security [and] also describes the bundle of rights that support indigenous peoples and local communities” (IIED, 2010a).

biocultural heritage area: “a community-led and rights-based approach to conservation based on indigenous traditions and philosophies of sustainability, and the use of local knowledge systems, skills and strategies related to the holistic and adaptive management of landscapes, ecosystems and biological and cultural assets” (Argumedo & Wong, 2010, p. 84).

biocultural system: “a complex, adaptive, linked social and ecological system and all its sub-systems and the relationships between them. These relationships between reciprocal parts of an indivisible whole are co-evolving and self-organising, producing rich biocultural diversity” (IIED, 2010b).

biodiversity: “the variety and variability among living organisms and the ecological complexes in which they occur; [...] the term encompasses different ecosystems, species, and genes” (US-EPA, 2010).

biopiracy: “relates to industrial patents that exploit indigenous biodiversity and traditional knowledge for the profit of (often foreign) companies without recognizing or compensating the source community” (WHO, 2011).

bioprospecting (biodiversity prospecting): “the collecting and documenting of biological samples and indigenous knowledge to help discover new biological resources” (CG, 2011).

Category V Protected Area: “a protected area where the interaction of people and nature over time has produced an area of distinct character with significant ecological, biological, cultural and scenic value: and where safeguarding the integrity of this interaction is vital to protecting and sustaining the area and its associated nature conservation and other values” (IUCN, 2009).

clonal seed: potatoes can be grown from ‘true’ seed (given off after flowering) or seed tubers (actual potatoes collected with the harvest and allowed to sprout); the latter type is known as ‘clonal seed.’

community conserved areas: “natural and/or modified ecosystem containing significant biodiversity values and ecological services, voluntarily conserved by (sedentary and mobile) indigenous and local communities, through customary laws or other effective means” (WPC Recommendation V26, 2003, as cited in Corrigan & Granziera, 2010, p. 1).

conservation farmers: farmers who “conserve, improve and make more efficient use of natural resources through integrated management of available soil, water and biological resources combined with external inputs [...] contribut[ing] to environmental conservation as well as to enhanced and sustained agricultural production” (Betuco, 2011).

crop wild relatives: “crop ancestors as well as other species more or less closely related to crops [which are] critical source of genes for resistance to diseases, pests and stresses such as drought and extreme temperatures” (Bioversity International, 2011a).

customary law: “a system of norms, values, normative principles, authorities, institutions and procedures which permits peoples and communities to regulate social life, resolve conflicts and organise order within the framework of their own culture and social needs. Such law includes old and new features, autochthonous and adopted elements, but corresponds to the cultural system of those who use it who see it as their own. It also includes the norms by which rules are created or changed. In other words, the recognition of customary law is not the recognition of a static body of rules, but rather of the right of right-holders to create new norms for themselves” (Yrigoyen Fajardo, 2002, p. 169).

ecosystem services: “the benefits people obtain from ecosystems” (Hassan, et al., 2005, p. 26); regulatory services provided by plants, animals, fungi, and microorganisms, such as pollination of crops, prevention of soil erosion, water purification, etc. (IUCN, 2011).

ex situ conservation: (Latin: ‘out of place’); “the conservation of components of biological diversity outside their natural habitats” (CBD, 2011).

food sovereignty: “is the peoples’, Countries’ or State Unions’ RIGHT to define their agricultural and food policy, without any dumping vis-à-vis third countries” (La Via Campesina, 2003).

functional food: “is similar in appearance to, or may be, a conventional food, is consumed as part of a usual diet, and is demonstrated to have physiological benefits and/or reduce the risk of chronic disease beyond basic nutritional functions” (Health Canada, 2002).

Gene Revolution: sometimes considered part of the *Green Revolution*, “a term relating to the advantages that have been harnessed by man’s better understanding of genetics [wherein] pre-determined mating of organisms has resulted in increased crop yields for example, as a result of more productive crops as a result of them having the desirable characteristics from its parents” (Biology Online, 2007).

genetic use restrictin technology: sterile (non-self-propagating) seeds developed through “gene-manipulation techniques that enable the protection of genetic material from unauthorized use and the prevention of self-supply of commercial seeds by farmers” (Goeschl & Swanson, 2003, p. 149)

genetically modified organism: “an organism whose genetic material has been modified or altered, especially through genetic engineering techniques [...] using recombinant DNA technology. The transgenic organisms are used mainly in the production of pharmaceuticals, gene therapy, and agriculture [despite] the possibility of unforeseen negative effects in health and environment” (Biology Online, 2007).

germplasm: “genetic material, especially its specific molecular and chemical constitution, that comprises the physical basis of the inherited qualities of an organism” (EU-Bio-Glossary, 2004).

glycoalkaloids: “natural toxins [that] are active as pesticides and fungicides and are produced by the plants as a natural defence against animals, insects and fungi that might attack them” (Davis, 2006).

Green Revolution: a term “coined in the 1960s and generally refers to a strategy of agriculture-led development, driven by research-induced technical change” (Sarmiento, et al., 2005, p. 15).

in situ conservation: (Latin: ‘in position’); “the conservation of ecosystems and natural habitats and the maintenance and recovery of viable populations of species in their natural surroundings and, in the case of domesticated or cultivated species, in the surroundings where they have developed their distinctive properties” (UN-CED, 1992).

Indigenous community conserved areas: see *community conserved areas*

Indigenous (traditional) knowledge: “broadly defined as the knowledge that an indigenous (local) community accumulates over generations of living in a particular environment [encompassing] all forms of knowledge – technologies, know-how skills, practices and beliefs – that enable the community to achieve stable livelihoods in their environment. [...] IK is unique to every culture and society and it is embedded in community practices, institutions, relationships and rituals. IK is considered a part of the local knowledge in the sense that it is rooted in a particular community and situated within broader cultural traditions. It is a set of experiences generated by people living in those communities. [...] IK is based on, and is deeply embedded in local experience and historic reality, and is therefore unique to that specific culture; it also plays an important role in defining the identity of the community. It has developed over the centuries of experimentation on how to adapt to local conditions. It therefore represents all

the skills and innovations of a people and embodies the collective wisdom and resourcefulness of the community” (UNEP, 2011).

landrace: “a dynamic population of a cultivated plant that has historical origin, distinct identity and lacks formal crop improvement, as well as often being genetically diverse, locally adapted and associated with traditional farming systems” (Villa, Maxted, Scholten, & Ford-Lloyd, 2005)

neglected and underutilized species: “chronically underexploited plant species at risk of genetic erosion or even extinction, typically harvested from the wild, and which play an important role in the food security for the rural poor in many parts of the world” (Bioversity International, 2011b).

nutraceuticals: “a product isolated or purified from foods that is generally sold in medicinal forms not usually associated with food [and] demonstrated to have a physiological benefit or provide protection against chronic disease” (Health Canada, 2002).

participatory plant breeding: “the involvement of end users (and sometimes other actors) in any number of the full range of genetic improvement activities [including] setting breeding goals, creating genetic variability, selecting within variable populations, evaluating and selecting experimental varieties, releasing and popularising new varieties and multiplying and distributing seed” (Foundation, 2001).

patent: an exclusive right, granted by a national or regional authority, for an invention (a product, process, or technical solution) that exhibits practicality, novelty, non-obviousness, and legal patentability (i.e. not being legally exempt from patent protection) (WIPO, 2011).

photoperiod: length of the day, or amount of daily exposure to light and dark (Biology Online, 2007).

phytogenetic: the origin and evolution of algae and plants (Keith, Novak, & Elliot, 2005).

plant genetic resources for food and agriculture: “the raw material indispensable for crop genetic improvement, whether by means of farmers’ selection, classical plant breeding or modern biotechnologies, and are essential in adapting to unpredictable environmental changes and future human needs” (FAO, 2004a).

secondary metabolite: in plants, “a large group of different chemical compounds which often perform vital functions” (Federal Ministry of Education and Research, 2011).

sui generis system: (Latin: ‘of its own kind’) “term is used in intellectual-property law to describe a regime designed to protect rights that fall outside the traditional patent, trademark, copyright, and trade-secret doctrines [...] [f]or example, a database may not be protected by copyright law if its content is not original, but it could be protected by a sui generis statute designed for that purpose” (Garner, 2009, p. 1572).

'terminator' seeds: see *genetic use restriction technology*

tetraploid: a plant with four sets of chromosomes, which is twice the standard number (GRAIN, 2000).

traditional knowledge: see *Indigenous traditional knowledge*

traditional resource rights: “an integrated rights concept that recognizes the inextricable link between cultural and biological diversity and sees no contradictions between the human rights of indigenous and local communities, including the right to development and environmental conservation. Indeed, they are mutually supportive since the destiny of traditional peoples largely determines, and is determined by, the state of the world’s biological diversity. TRR includes overlapping and mutually supporting bundles of rights [...]. TRR go beyond other sui generis models in that they seek not only to protect knowledge relating to biological resources but also to assert the right of peoples to self-determination and the right to safeguard ‘culture’ in its broadest sense” (Posey & Dutfield, 1996, p. 95).

transgenic: see *genetically modified organism*

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